



Consultation Report

Urban and Fringe Housing Strategy

Client: Goulburn Mulwaree Council

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1 Introduction

Goulburn Mulwaree Council is in the process of preparing an Urban and Fringe Housing Strategy (the Strategy) to address an increasing shortage of available zoned residential land in Goulburn and Marulan.

The Strategy seeks to identify the future housing needs for Goulburn and Marulan and provide recommendations to guide land use decisions and local policy.

The Strategy has been developed in two phases with the first phase being the initial community and stakeholder engagement undertaken by Council in April and May 2018. This phase of the project established the issues and tested these with stakeholders and the community. This initial stage built on the vision of the LGA that has been adopted in the Regional Community Plan to:

To build and maintain sustainable communities while retaining the region's natural beauty.¹

Following the initial engagement, Council appointed Elton Consulting to prepare the Strategy.

A draft Strategy was developed having regard to the direction provided in the *South East and Tablelands Regional Plan 2036* and the draft *Housing Strategy Guidelines* prepared by the Department of Planning and Environment (DPE). The purpose of the Strategy is to guide land use and planning decisions and inform amendments to the *Goulburn Local Environmental Plan* in the immediate and medium term.

1.1 The Process

The steps in the preparation of the Strategy have evolved as the project progressed as follows:



¹ The Tablelands Regional Community Strategy Plan 2016-2036.

2 Consultation and Strategy Development

2.1 Pre-Strategy Consultation (Stages 1 and 2)

Council commenced preparation of the Strategy early in 2018 with Pre-Strategy Consultation and a package of information to inform initial discussion referred to as *Talk of the Town*. The *Talk of the Town* Housing and Residential Growth background information included a series of five information sheets (refer **Attachment A**).

Three workshops were conducted by Council Staff over the Pre-Strategy Consultation period. This comprised of two workshops in Goulburn and Marulan that were open to the general public and an industry focused workshop in Goulburn targeted specifically at industry bodies.

Talk of the Town background information

The *Talk of the Town* Housing and Residential Growth background information included a series of five information sheets to inform initial discussion on the Housing Strategy.

Sheet 1: Background

Sheet 2: Affordability, infrastructure and the role of Council

Sheet 3: Social needs and opportunities and environmental considerations

Sheet 4: the role of planning policy and principles to guide decision making

Sheet 5: Study Area maps

The process included an online survey and a number of workshops and drop-in sessions. During this period 9th April – 25th May.



What the Community Said

The Community Engagement approach included an interactive, online tool that allowed comments via a pin drop. Eleven pins were dropped in Goulburn. Comments ranged from the need to continue expansion in sync, the importance of preserving future urban land in the north from fragmentation into large lots and the need for additional land to be delivered in the west.

There were also comments highlighting the opportunities to the south of the existing urban footprint on both sides of the Hume Highway on Windellama Road.

2.2 Workshops

Three workshops were conducted by Council Staff over the Pre-Strategy Consultation period. This comprised of two workshops in Goulburn and Marulan that were open to the general public and an industry focused workshop in Goulburn targeted specifically at industry bodies.

Marulan Workshop

There were seven people who participated in the Marulan Workshop on 3rd May 2018. Participants acknowledged that housing in Marulan was required to meet the needs of a broad demographic from younger first home buyers through to housing of the needs of older people and singles. The opportunity to deliver housing at an affordable price point was noted.

There was a view that larger lots were better and a converse view that smaller houses were important meeting the needs of households with only two people. It was suggested that there was an opportunity for higher density housing closer to the station. Although there was support of higher densities and housing to suit couples, dual occupancies and granny flats were considered unsuitable.

In terms of housing typology, it was felt that the country town character was important and that single storey dwellings were more suitable and in keeping with the character. Accommodating larger lots close to town was also supported.

Goulburn Workshop

Goulburn attracted a larger rate of participation with between 15 and 20 participants on 10th May 2018. The group were divided to discuss specific topics. The key issues identified are outlined as follows:

» **Planning Policy and Principles**

This group highlighted the necessity of providing housing choice and diversity including consolidation, infill development in the form of secondary dwellings and dual occupancy. They recognised that Goulburn provided an alternative to Canberra based on affordability.

They held the view that Goulburn will grow when Council is behind the expansion and that the planning process for permissible development should be easier.

» **Housing Affordability, Product Diversity and Demographics**

Affordability is identified as a key factor in growth and this group highlighted the opportunity to provide increased densities in the CBD.

The larger lots and general built form of the newer development at Marys Mount was questioned and the 'bowling alley effect' was cited as an undesirable outcome in terms of the relationship between the setbacks and front fencing. In addition, the need for the conservation of land for open space verses the provision of private open space was discussed.

There were concerns about growth further from the CBD and the impact that creating a second town centre would have on the Goulburn CBD when so many retail premises are currently vacant.

Finally, the need for additional lifestyle development was flagged although there seemed to be different views as to whether this form of lot is more desirable when connected to sewerage.

» **Social Needs, Opportunities and Natural Environment**

This group looked at how housing shapes the community and there was a focus on diversity, walkability and communal spaces such as gardens. In terms of the needs of the community, affordable and energy efficient housing to suit a wide demographic was noted.

As for quality of housing, sustainability was a reoccurring theme, including more trees in the streetscape and provision of quality open spaces were all important. Challenges raised included noting that the people building houses are not the end user and rentals lack insulation and solar.

In terms of walkability and transport provision of walking and cycling paths should be provided. It was noted that there is a strong cycling community and facilities such as bike parking for residents in development should be considered. The group suggested that Council could encourage the use of public transport both in town and between the region and Canberra. Amongst the challenges to walkability and provision of open space were costs, the reluctance of developers to provide useable spaces, maintenance of open space and viability of public transport.

» **Council's Role and Infrastructure**

This group looked at what Council needs to consider in providing housing over the next 20 years. Addressing demand by providing opportunities for a diverse range of housing, encouraging higher densities close to the CBD by potentially including higher forms of development. Council should also be supporting the delivery of social housing dispersed through the residential areas. They supported the importance of sound planning.

There was support for additional 2Ha lots spread throughout the fringe, rather than all together and having green spaces separating these.

Retention of the environmental heritage was also included as important and support was provided for 3-10 storey residential development close to the CBD.

Industry Workshop

The final workshop was undertaken with industry. Again, the detailed notes are attached in **Appendix A** and some of the key issues are highlighted here.

Participants were divided into three groups and looked first at the key drivers; Spatial, Demographic, Economic and Household Type. Responses were very similar to the issues discussed at the other community workshops.

Proximity to Canberra and Western Sydney, the willingness of people to travel for work as a trade-off for lifestyle and relocating from within the Goulburn Mulwaree LGA closer to the centre of Goulburn for better access to services. Demographic drivers included predominately providing for the over 50s and families. The price of land was considered as an economic driver both too expensive and by another group affordable encouraging development. Similarly, one group cited the quick sale of land and villas and another raised the issue of the small number of lots available to the market at any one time. Villas and having a variety of housing typologies were amongst the household drivers but one group questions whether smaller lots was something that was wanted.

The groups also discussed governance and infrastructure and planning principles and controls with very similar results to those flagged by the community in earlier workshops. Again, supporting increased density and diversity, managing the urban fringe and providing opportunities extending from Marys Mount and avoiding constrained land were key.

Controlling lot sizes and better using development controls to manage the built form, managing and preserving heritage and the historical character of the towns and taking a closer look at how infrastructure can be funded through local contributions. Ageing in place, protecting the integrity of the main street of Goulburn were all important.

2.3 Initial Agency Consultation

The initial phase also included seeking preliminary feedback from Government agencies. Council received comments from the Department of Planning and Environment, Office of Environment and Heritage and Water NSW. The issues raised by the agencies are outlined in **Table 1** below and have been considered in the formulation of the Strategy.

Table 1 Preliminary Agency Consultation

Agency	Issues Raised
Department of Planning and Environment	<p>Strategy should address the South East and Tablelands Regional Plan, in particular Goulburn Local Government narrative and the directions as follow:</p> <p>Direction 8 Protect important agricultural land</p> <p>Direction 13 Manage the ongoing use of mineral resources</p> <p>Direction 14 Protect important environmental assets</p> <p>Direction 15 Enhance biodiversity connections</p> <p>Direction 18 Secure water resources</p> <p>Direction 23 Protect the region's heritage</p> <p>Direction 24 Deliver greater housing supply and choice</p> <p>Direction 25 Focus housing growth in locations that maximise infrastructure and services</p> <p>Direction 27 Deliver more opportunities for affordable housing</p> <p>Direction 28 Manage rural lifestyles</p> <p>The Strategy needs to address the Ministerial Directions</p>
Office of Environment and Heritage	<p>Need to consider impacts to biodiversity and factor in costs of offsetting. To maintain a supply of affordable housing areas with high biodiversity values should be avoided</p> <p>Constraints mapping should be undertaken to identify less constrained areas as suitable for development</p>
Water NSW	<p>Consider land capability and Ministerial Direction 5.2 Sydney Drinking Water Catchment</p> <p>In infill and existing urban areas stormwater management will need to be considered</p> <p>Consider capacity of sewerage network</p> <p>Seniors Housing will need to be connected to reticulated sewer</p> <p>Recommends review and update of Council's OSSM Strategy to ensure that it remains effective and achieves appropriate environmental outcomes on rural residential land</p>

3 Preparation of a Draft Strategy

Following the initial community and stakeholder engagement, Council appointed Elton Consulting to prepare the Draft Strategy. The methodology included the following:

- » Review of the initial feedback from the early stage consultation.
- » Population and Demographic Analysis.
- » Understanding the housing demand.
- » Housing supply including the consideration of the existing land use framework.
- » Opportunities and constraints to delivery of housing and identification of key release areas and yield analysis to determine capacity.
- » Identification of preferred options to meet the forecast demand for housing to 2036.
- » Consideration of 38 sites that had, over the past 10 years, been identified by Council or land owners as land that could be considered for housing.
- » Recommendations for release of additional residential land including the planning mechanisms to deliver the land.

The Draft Strategy was considered by Council in December 2018 and placed on Public Exhibition.

4 First Public Exhibition of Draft Strategy

The Draft Strategy was placed on Public Exhibition by GMC between 10th January and 22nd February 2019.

4.1 Draft Strategy and Exhibition Process (Stage 4)

On 18th December 2018 Council resolved to place the Draft Strategy out for Public Exhibition and invite submissions from interested persons. This exhibition period was between 10th January and 22nd February 2019. Two drop-in sessions were hosted by GMC at Goulburn and Marulan for the Draft Strategy exhibition. Details as follows:

1. **Marulan Drop In**
5th February 2019 2pm-6pm
Marulan Community Hall 70 George Street, Marulan
2. **Goulburn Drop In**
11th February 2019 2pm-6pm
Council Chambers 184 Bourke Street, Goulburn

During the Public Exhibition period 33 submissions were received, six from Agencies, and 27 from members of the public. These submissions are summarised in **Table 2**, below. A map indicating the area to which the submission relates has been provided in **Figures 1** and **2**. Many of the submissions relate specifically to the consideration of the 38 Opportunity Sites provided by Council. The Draft Strategy included the Opportunity Sites Assessment as a separate Appendix (D). The 'Appendix D Key Sites Assessment' should be read in conjunction with this Consultation Report.

The Draft Strategy was amended following the initial exhibition period in response to submissions and the desire to more thoroughly address rural lifestyle development opportunities on large lots.

4.2 Summary of Public Submissions

Table 2 Overview of Public Submissions during First Exhibition

No.	Submitter/Precinct	Issues Raised
Precinct 2 Run 'O' Waters		
8	Paige Batchelor 6 Bowerman Rd, Run'O'Waters <i>Not an identified site</i> Precinct 2 Run 'O' Waters (rural north)	Currently RU6 Transition with 10 Ha LSZ. Suggests extending 2,000 sqm from Run'O'Waters to Gurrundah Rd for small to medium rural residential lots. This would allow people to move into the area while retaining the feel for country life while living close to town. Response/Comment: A key objective of the Strategy is to identify and protect land for the delivery of the housing needs to 2036. In particular, this includes identifying opportunities for serviced residential land. The constraints to the expansion of the urban fringe are significant.

No.	Submitter/Precinct	Issues Raised
		<p>This site has been included in the area considered for serviced residential land in the medium term. The constraints through the precinct, including slope and biodiversity will likely influence actual lot sizes but a 700sqm minimum is recommended.</p>
35	<p>Steve Bray 189 Gurrundah Rd, Run'O'Waters</p> <p><i>This is identified as Site 37.</i></p> <p>Precinct 2 Run 'O' Waters (Rural North)</p>	<p>Site is currently LZN RU6 Transition + LSZ 10 Ha. The site is 10 hectares in size. Submission proposes change to 2 Ha (LSZ).</p> <p>Response/Comment: This area has been identified as suitable for large lot residential development. The issue will be timing and the orderly development of this and adjoining land.</p>
23	<p>Elton Consulting for Stewart Thompson 65 Foord Rd, Run'O'Waters</p> <p><i>This site is identified as Site 4.</i></p> <p>Precinct 1 and 2 Run 'O' Waters</p>	<p>Currently RU6 Transition LZN + 2 Ha & 10 Ha LSZ. Proposes R5 Large Lot Residential LZN & E2 Env Lvg + 1-2,000 sqm + 10 Ha LSZ. Requests that the 131.2 Ha site be identified for 'Future Investigation' as categorised by the DHS. The submission also recommends that the site be included in the Council led Planning Proposal to amend the GM LEP 2009 to: Rezone the land from RU6 Transition to R5 Large Lot Residential and/or E2 Environmental Living; reduce the LSZ of Lot 337 and Lot 10 from 1 Ha to 1000sqm- 2,000sqm (depending on infrastructure); and amend the Terrestrial Biodiversity Map to more accurately reflect ecological/biodiversity values of the site and adjoining properties.</p> <p>The submission also includes a Preliminary Draft Subdivision with an estimated lot yield totalling 40-80 residential lots comprising: 40-80 residential lots (1-2 Ha); a couple of 5 Ha lots and a 10 Ha lot. A draft Concept plan is included that aligns with their ecological assessment of the site</p> <p>The site can be connected to water and sewer but requires significant works to make these connections (water and sewer are not at the property boundary).</p> <p>Response/comment: The area to the West of Goulburn was initially disregarded, primarily due to the biodiversity constraints and the ability to service the land. In addition, the amount of land required for residential development to 2036, in the draft Strategy, could be accommodated to the north of Goulburn.</p> <p>It is still the case that there is land suitable, and unconstrained in the Middle Arm precincts. However, there are short term capacity issues in terms of the existing water and sewer and major upgrades will be required.</p> <p>As a result, further investigation has been undertaken to look at the suitability of the Run 'O' Waters Precincts to accommodate serviced urban land with minimum lot sizes of 700sqm. Where investment in infrastructure is required, Council should seek the most efficient use of those assets (water, sewer, roads). To that end, delivering fully serviced land with a 700sqm is a much more desirable outcome for Council who will be responsible for the ongoing maintenance of those assets.</p> <p>In addition, having a second development front may also provide choice and diversity.</p>

No.	Submitter/Precinct	Issues Raised
Following a review of the biodiversity constraints by EcoLogical Australia, and further investigation of the capacity of the water and sewer this area has been re-visited.		
Precinct 3 Baw Baw		
19	Con Toparis 11 Gurrundah Rd and 59 Foord Rd, Goulburn <i>Lot 335 is an identified site (Site 8).</i>	<p>Currently RU6 Transition LZN + 2 Ha LSZ. Proposes 2,000 sqm LSZ or Retirement Village.</p> <p>Response/Comment: Water is nearby but sewer is 250 metres away. Site is contiguous to existing R5 zoning.</p> <p>The Baw Baw Precinct should be retained as transition. Development of this precinct should be limited to avoid further fragmentation.</p> <p>The development for the purpose of a Retirement Village is prohibited in the zone. There are alternative sites where this form of land use is permissible.</p>
Precinct 3 Baw Baw		
25	Alex and Jan Weir 70 Gurrundah Rd, Goulburn <i>This site is identified as Site 22</i>	<p>Currently RU6 Transition LSN + 10.16 Ha LSZ. Was proposed as part of Amendment 2: Not included because High Conservation Value; insufficient water and sewer infrastructure; and drainage (to Wollondilly River). Proposes R5 Large Lot Residential with a minimum lot size of 2,000 sqm. As does submission #22, this submission compares the site with nearby sites (8 and 10) because whereas Sites 8 and 10 are supported for rezoning, Site 22 contains minimal biodiversity (nil present according to Table 1 Biodiversity Constraints Analysis) and no heritage items and that site 10 is immediately adjacent to an existing subdivision. The submission also considers that it is favourable against the Additional R5 Criteria (Appendix 4.8) and would provide a gradual density transition from the existing urban area to the rural zone. The Weir's state that the site is unhindered by constraints as it has town water and is serviced by school bus routes, power, broadband, sealed roads and waste management services. The submission says that the site is capable of supporting lots greater than 2,000 sqm with an on-site wastewater management system.</p> <p>Response/Comment: Generally agree that the site could support large lot residential development 2ha-5ha. However, in the long term the area is better placed to provide serviced residential land. In the interim, the Baw Baw Precinct should be retained as transition. Development of this precinct should be limited to avoid further fragmentation.</p>
Precinct 4 Sooley		
28	Precise Planning 515 Crookwell Rd, Kingsdale <i>This site is identified as Site 12</i>	<p>Currently E3 Environmental Management LZN + 100 Ha LSZ. Proposing R5 Large Lot Residential LZN with 4,000 sqm-2 Ha LSZ (<i>but not farms</i>). HS recommends RU6 Transition LZN and retain 100 Ha LSZ. A concept plan has been provided in line with proposal. The submission emphasises current demand (based on discussions with Real Estate agents) for Rural Residential 'Lifestyle' lots and the attraction (and retention) of a specific socio-economic group (complete with a high disposable income) should be a priority. Submission restates (from HS) <i>site is unconstrained with only moderate biodiversity impacts in some</i></p>

No.	Submitter/Precinct	Issues Raised
		<p><i>placed however part of the site is mapped as Strategic Agricultural Land in LEP. Submission makes the site ideal for planned transition from urban to rural and will make a statement as to rural character upon entry from that direction. Site 6 (Chinamans Lane) is located immediately adjacent which is supported (in HS) for 1,500 sqm lots.</i></p> <p>Submission recommends transition of proposed lots would be better created now rather than in future. <i>Real Estate agents have indicated there are numerous 2,000 sqm lots available but very little stock (and great demand) of 4,000, 1 Ha and 2 Ha lots. Submission says these should be created for the Lifestyle choice of existing aspirational land owners.</i></p> <p>Housing Demand: pointing to success of Run'O'Waters.</p> <p>Economic Case: high income earners (target purchasers) <i>are often employers and have high disposable income to invest in a range of local investments, often employment generating and it is vital that land be provided to this group of people.</i></p> <p>Serviceability: The submission points out that long term the site could be serviced by sewer (but in the meantime this would be uneconomical) but <i>helpfully, lots of the size proposed can accommodate onsite effluent disposal.</i></p> <p>Responses to SETRP:</p> <p>Goal 1 A connected and Prosperous Community Directions 8.1 & 8.2 (Agricultural Lands); <i>Site is in vicinity of Strategically Important Agricultural Land</i> and if the site is zoned RU6 Transition it would sterilise the subject site for Intensive Agricultural Use. <i>This land could be viewed as interface through R5 LLR.</i></p> <p>Goal 2 Diverse environment with biodiversity corridors Directions 14.2, 14.3 and 15.1: <i>The site is not an area identified as high environmental value and if rezoning proceeds then intensive ecological investigations, including avoidance, minimisation and offsetting would be undertaken.</i> Direction 18.1, 18.3 & 18.4 Water catchments and water cycle management: <i>A more intensive analysis will be required including the setting of OSD and water quality targets to protect downstream water from adverse impacts. An integrated water cycle management strategy could be prepared in the event the proposal proceeds.</i></p> <p>Goal 3: Healthy and connected communities: Directions relate to <i>inter alia</i> Heritage and Neighbourhood Planning Principles.</p> <p>Goal 4 Environmentally Sustainable Housing choices: Directions for Housing Strategies and Principles providing housing choice in the form of villas and in strategic centres and opportunities for seniors housing.</p> <p>The submission concludes that the owner objects to the HS recommendation that the subject site be rezoned RU6 Transition and retaining of 100 H LSZ. For 2 reasons: <i>1) There is no way of predicting when the subject site for this purpose (?) whilst demand for larger lots remains unaddressed and unfulfilled and the owner would be left in limbo, and 2) The RU6 transition zone permits extensive agriculture but not intensive ag (livestock or plant). Extensive agricultural pursuits, and other permissible uses, are unviable on this site because of the</i></p>

No.	Submitter/Precinct	Issues Raised
		<p><i>necessary investment required to achieve viability and other forms of ag that require less land and (sic) prohibited. The imposition of the RU6 Transition and the retention of the 100 Ha LSZ, whilst waiting for some indeterminate future time when the site may be required for residential development, will place a heavy burden on the landowner.</i></p> <p>Response/Comment: Additional work has been undertaken to understand the demand/supply for rural residential/large lot residential land. A more detailed precinct approach has been taken to determine the opportunities for large lot residential as well as serviced residential land.</p> <p>Agree with the submitter that large lot residential provides a housing choice and as a result further consideration has been given to where this form of development could be accommodated.</p> <p>Given the constraints in this precinct, there are other areas better suited to the delivery of large lot residential land.</p> <p>Further, the submission highlights the BSAL and suggests that if the site is zoned RU6 Transition it would sterilise the subject site for Intensive Agricultural Use. Retention of agricultural land is a key objective of both DPIE and NSW DPI.</p> <p>Agree with the submitter that the Transition zone is not suitable and recommend that the site be retained as E3.</p>
30	<p>Chris Parlett (Parlett & Murray family) (18 March, 2019) Further joint submission from SCCS (21 February 2019) 407 and 457 Crookwell Rd, Kingsdale</p> <p><i>This site is identified as Site 6.</i></p> <p>Precinct 4 Sooley</p>	<p>Currently RU6 Transition LZN + 10 Ha LSZ. Proposed since 2006. Proposing lots of 1,500 sqm (consulting with Council staff – 700 sqm). Submission states land is identified as the <i>transition zone</i> in the <i>Future Urban Area</i> whereas land on eastern side of Crookwell Rd is Proposed Urban Release Area (Short Medium term). They would like to be identified as <i>Proposed Urban Expansion Area</i> (short to medium term release). They are flexible in terms of lot size (700-1,500 sqm). Submission from SCCS states services have been extended to the boundaries of the site by the urban expansion opposite to the south and east. They also identify that services are currently further away from the <i>Proposed Urban Release Area</i> than they are from the subject site. They conclude not unreasonably that the inclusion of the subject site in the <i>short to medium term urban release area</i> would be a more orderly and logical planned outcome. SCCS also note the constraints of Sooley Dam, that the HP Gas pipeline passes through the northern portion of the subject site and that Council is making its own enquiries in this regard. SCCS also identify however that the HP Gas pipeline also passes through the <i>Proposed Urban Release Area</i>. In view of this, SCCS submit that their clients should not be considered as unsuitable for inclusion in the <i>short to medium term release</i>. With regard to Sooley Dam, SCCS submit that stormwater would flow away from the Sooley Dam Catchment to the east and south therefore no impact on Sooley Dam water quality from urban development.</p> <p>The submission from SCCS also provides a checklist of the subject site against the criteria identified in Section 2.1.1 of the Opportunity Sites Assessment (but none for Section 2.1.1</p>

No.	Submitter/Precinct	Issues Raised
		<p>Additional Criteria for Large Lot residential Land). Against the criteria submitted it provides a favourable outcome. In particular it notes that a <i>Flora and Fauna</i>, submitted in June 2010 for a previous rezoning submission, identifies the land as having minimal impact upon flora and fauna issues. With regard to biodiversity fragmentation, they state that the land has been significantly modified over a long period of time however while it is currently being used for agricultural purposes, they believe the extent of the proposed urban expansion area will have minimal impact on Rural Planning and Subdivision principles contained in the Rural Lands SEPP. SCCS submit that <i>appropriately selected minimum lot sizes</i> will contribute to housing affordability and suggest a LSZ of 700 sqm. The last of the criteria consider that the short to medium term release <i>would contribute to the orderly and responsible pattern of urban expansion and thus minimise conflict with agriculture and primary industry.</i></p> <p>Response/Comment: But for the BSAL and this area is suitable for urban development, however, while ever this area remains mapped as bio strategic agricultural land, it will impede the orderly development of the area. For this reason it was tagged as a future urban area and this remains the case. Further investigation has been undertaken at a precinct level to better understand the opportunities for serviced land that is unconstrained.</p>
17	<p>Lynette Thurbon 486-512 Crookwell Road, Kingsdale</p> <p><i>This is not an identified site but is located between Site 26, Site 12 and Site 2.</i></p> <p>Precinct 4 Sooley Precinct 5 Middle Arm West</p>	<p>Currently RU6 Transition & E3 Env Management + 10 Ha and 100 Ha LSZ respectively. Notes proximity to Marys Mount and Teneriffe Subdivisions. The owner would be amenable to a zoning change to residential and would appreciate feedback in relation to any zoning changes.</p> <p>Response/Comment: In reference to Middle Arm West refer comments below.</p> <p>In relation to Lot 2 DP29253, the lot is in the Sooley Precinct and it is split by the gas pipeline and watercourse. Given the extent of land already identified by the RU6 Transition zone in the north and west of Goulburn, rezoning for this land is not supported at this stage. Refer Precinct Map.</p>
Precinct 5 Middle Arm West		
4	<p>Urbanism Crookwell Rd Goulburn, Lots 1-4 'Mistful Park'</p> <p><i>This is an identified site (Site 26)</i></p> <p>Precinct 5 Middle Arm West</p>	<p>Site is currently mostly E4 Environmental Living & R2 Low Density Residential with minimum lot sizes of 10 Ha & 700 sqm respectively. Council resolved in-principle support to rezone 'Mistful Park' (Site 26). Final HS should address inconsistency between 'Site Assessment Table' (Appendix) supporting 700 sqm lots and Corresponding table (p7) of HS says 'not supported' recommending Council 'Consider the potential for residential development in the context of the expansion of the urban area subject to a site-specific biodiversity assessment'. Request the Appendix table be amended to reflect Council's 'adopted position'.</p> <p>Site-Specific Biodiversity Assessment: One has been done by Woodlands Environmental Management (7 August 2017). SSBA</p>

No.	Submitter/Precinct	Issues Raised
		<p>found that 24% of the site's White Box/Yellow Box Blakely's Red Gum Woodland was in low to moderate condition (not identified as high conservation value) and is not identified as Terrestrial Biodiversity in GM LEP 2009. Development Standards could be applied to the 24% (Larger Lot Sizes) and this would improve the management regime of the area and dispense with the need for offsets for any loss of EEC's. Request Appendices be amended to reflect biodiversity assessment has been undertaken and that further consultation with OEH following a Gateway Determination is appropriate.</p> <p>Response/Comment: This site has been reconsidered as part of the post-exhibition work for the Strategy. The site is highly constrained in terms of biodiversity. It is acknowledged that previous work has been undertaken in terms of Biodiversity Assessment, and this supports the Strategy finding.</p> <p>Notwithstanding the biodiversity issue, the site is otherwise well suited to urban development. It is contiguous with the existing residential zone. A detailed BDAR and BAM assessment under the Biodiversity Conservation Act is required to support the rezoning of this site and it is agreed that this could be undertaken as a Post Gateway task given the broader strategic merit of the site for urban development.</p> <p>Refer to Precinct 5 Middle Arm in the revised Strategy</p>
13	<p>Ken & Denise Hogan 157 Middle Arm Rd Goulburn</p> <p><i>This is not an identified site. The nearest identified site is Site 1 (see also submission 15 and 22).</i></p> <p>Precinct 5 Middle Arm West</p>	<p>Currently LZN RU6 Transition + LSZ 20 Ha (AB2). Proposing 2 Ha Lifestyle Lots (Un-serviced). This addresses the factors affecting demand and supply and cites the DUFHS in several places, in particular the potential shortage in supply of R5 land around Goulburn and the Strategy's failure to identify suitable land around Goulburn to take up this shortfall.</p> <p>In its response to Constraints and Land Suitability this submission notes that the Strategy identifies the land to the north of Goulburn as devoid of 'other major constraints' such as flooding and the suitability of this land for Rural Residential development in terms of Topography, Biodiversity & Drainage, Bushfire Hazard, Cultural Heritage and reticulated water and sewer. It then goes on to cite Direction E of Section 7 Strategic Actions and responds to the 'Additional Criteria for Rural Lifestyle Development' criteria (contained in Appendix E of the Site Assessment - Opportunity Sites report) demonstrating support for the proposed amendment.</p> <p>The submission is clear in what is being requested and not unjustified (or unsubstantiated) in this request, based on the evidence it presents.</p> <p>Response/Comment: This submission highlights the shortfall in the Draft Strategy in terms of addressing the need for additional large lot residential development opportunities.</p> <p>In response, the Strategy has been reviewed to include a more detailed Precinct based approach to the identification of housing opportunities, particularly on the urban fringe.</p> <p>Additional work was undertaken to determine the current supply of large lots (2Ha) and factors that need to be considered in the release of additional land for this purpose. Refinement</p>

No.	Submitter/Precinct	Issues Raised
		<p>was also made to the criteria, in particular highlighting those areas that are considered key in terms of the long term future development of Goulburn.</p> <p>In terms of this site itself, it is in an area that, in the long term, is important to retain for urban purposes.</p>
15	<p>Antonio, Peter & Salvatore Graziano 153 Middle Arm Rd, Goulburn</p> <p><i>This site is not an identified site however Site 1 is the nearest identified site (see also submission 13 and 22).</i></p> <p>Precinct 5 Middle Arm West</p>	<p>Currently RU6 Transition LZN + 20 Ha LSZ. Proposes R5 Large Lot Residential LZN + 4,000 sqm LSZ.</p> <p>The owner's advise that they have held a meeting with adjoining landowners to make a formal submission to the DUFHS and that the owners are willing to work with their neighbours (125 & 157) who also seemed to want to work together. The purpose of their submission is to provide Council additional Information to demonstrate that there is a real need to rezone the subject site to R5 Large Lot res (2 Ha). It also seeks to demonstrate that there is a clear shortage and is a logical and sequential position with minimal constraints and, together with adjoining landowners, creates a new large lot residential precinct.</p> <p>Response/Comment: refer comments above.</p>
22	<p>Milestone Pty Ltd 125 Middle Arm Rd, Middle Arm</p> <p><i>This site is not an identified site (see also submissions 13 and 15) but is located near to Sites 1 and 5.</i></p> <p>Precinct 5 Middle Arm West</p>	<p>Currently RU6 Transition LZN + 20 Ha LSZ. Proposes R2 Low Density Residential and 700 sqm LSZ. The submission seeks clarification on the timeframe for an overarching Planning Proposal to rezone the Urban Release Area, they understand to R2 Low Density Residential, and intends to subdivide following rezoning.</p> <p>The submission quotes figures from the SETRP and ticks (P) that the proposed Amendment would comply with five (5) of the twelve (12) objectives of the strategy from Section 6 The Priorities. The submission identifies that the subject site is contiguous with the Draft Proposed Urban Release Area and quotes the opening sentence from the Northern Development Front (p113) that the subject area <i>offers the most suitable location for the majority of the greenfield housing supply.</i></p> <p>The submission concludes that there is planning merit to support the rezoning and future subdivision on the basis that the proposal will: support the key aims of the Regional Plan; Abuts the northern side of the 'Proposed Urban Release Area'; Is of similar size and dimensions to two 'opportunity' sites to rezone to R2 Low Density Residential; Is free from significant environmental and topographical constraints and is free of hazards (flooding, contamination, landslip and erosion); Will not lead to adverse impact or land use conflicts related to agriculture, forestry, industry and mining; Is not an area of critical habitat loss and fragmentation; It is well within the 'urban fringe' area as defined in the DUFHS; It is accessible via the existing road network and is within a short 5 minute drive to the Goulburn CBD.</p> <p>Subject to In-Principle support of Council Officers to nominate the site as a candidate for rezoning, Milestone intend to proceed with the Planning Proposal as soon as practicable and in the first instance meet with Strategic Planning staff for a Pre-Lodgement Planning Proposal Meeting. Clarification is sought</p>

No.	Submitter/Precinct	Issues Raised
		<p>regarding Council's timeframe and Intentions so their client can make an informed decision whether to proceed with a Planning Proposal application to Council.</p> <p>Response/Comment: Refer to other comments above. Generally, the Middle Arm West Precinct is considered suitable for future residential development. The issue will be undertaking the development in a master planned and coordinated manner and the timeframe for when the land is required.</p>
36	<p>Laterals 225 Middle Arm Rd, Middle Arm</p> <p><i>This is not an identified site</i></p> <p>Precinct 5 Middle Arm West</p>	<p>Site is currently zoned RU6 Transition + 20 Ha LSZ and has an area of 54 Ha. Proposing to rezone to allow lot sizes of 2 Ha for Rural Lifestyle Development.</p> <p>Response/Comment: Refer to other comments above. Generally, the Middle Arm West Precinct is considered suitable for future residential development. The issue will be undertaking the development in a master planned and coordinated manner and the timeframe for when the land is required.</p>
Precinct 8 Gorman Rd		
2	<p>James Hoskins 69 Gorman Rd, Goulburn</p> <p><i>This is not a previously identified site but is located adjacent to Site 39.</i></p> <p>Precinct 8 Gorman Rd</p>	<p>Notes the resolution (2018/584) to enable large block sizes at 534 Taralga Rd (across the river) and the identified land (Site 39) adjacent to the subject site. The suggestion is to rezone the adjacent land for Rural Residential development with an LSZ of 2Ha (currently zoned SP2 with no LSZ) as suggested by the Draft HS (Site 39). Also seeks a reduction for his site on Gorman Road to 2Ha minimum lot size.</p> <p>Response/Comment: This area is unlikely to be developed for urban residential greenfield housing due to biodiversity limitations, bushfire and limitations to infrastructure (water/sewer) provision.</p> <p>The existing RU6 Transition zone has been identified in the revised Strategy as future large lot residential.</p>
6	<p>Lola Marmont/ 22-28 Gorman Rd Goulburn</p> <p><i>This is an identified site (Site 27).</i></p> <p>Precinct 8 Gorman Rd</p>	<p>Currently RU6 Transition + 10Ha LSZ. Proposes to revise LSZ to 2Ha for her 4.4 Ha property. Property has sealed road, town water (+tank and bore).</p> <p>Response/Comment: Refer comment above.</p>
9	<p>Noel and Renate Johnson-Barrett 88-96 Gorman Rd Goulburn</p> <p>Precinct 8 Gorman Rd</p>	<p>Currently RU6 Transition + 10 Ha LSZ. Proposes 2 Ha LSZ. Wants to assist meeting anticipated housing demands. Their land offers good access to town centre.</p> <p>Response/Comment: Refer comment above.</p>
12	<p>Brian Soley 201 Gorman Rd, Goulburn</p> <p>Precinct 8 Gorman Rd</p>	<p>Currently RU6 Transition LZN + 10 Ha LSZ. Proposing lot sizes in Gorman Road area be reduce to 2Ha. Wants to enjoy rural setting however acknowledges large lot sizes are hard to maintain and are not always affordable when wanting to buy.</p> <p>Response/Comment: Refer comment above.</p>

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16	Doug Rawlinson 36 Gorman Rd, Goulburn Precinct 8 Gorman Rd	Currently zoned part E3 Environmental Management & RU6 Transition with a LSZ of 100 Ha and 10 Ha respectively. Proposes 2 Ha LSZ. The submission advises there are 10-12 hectare 'farms' and he would like to change the zoning to enable him to 'subdivide off' 1 or 2 smaller allotments. Response/Comment: Refer comment above.
Precinct 9 Mt Gray East		
3	Jenni & Norman Aubrey 159 Rifle Range Rd, Goulburn <i>This is not a previously identified site. It straddles the Hume Highway</i> Precinct 9 Mt Gray East and 10 Mountain Ash	Currently Single Lot with split zone (RU6 and E2) by Motorway and want amendment to RU6 Min Lot Size to subdivide 40Ha on south eastern portion. Response/Comment: The split zone clause in the LEP does not assist with the subdivision of this site which straddles the Hume Highway. The site is slightly too small to allow for a two lot subdivision using Clause 4.6 of the southern side zoned RU6 also. The Mountain Ash Precinct is almost entirely outside the identified urban fringe. The RU6 zone is unlikely to be considered for serviced urban land. The current MLS is 20Ha. It is recommended that the LEP be amended to enable the southern portion of the site to be subdivided to create a separate lot.
Precinct 10 Mountain Ash		
27	TCG Planning Mountain Ash Rd, Brisbane Grove <i>This is identified as Site 25</i> Precinct 10 Mountain Ash	Currently RU1 Primary Production LZN + LSZ of 100 Ha. Submission proposes R5. Large Lot Residential with a LSZ of 2 ha. In 2015, DPE recommended (2Ha) (LLR) PP be resubmitted following review by Council of take up and supply of 2-20 Ha rural lifestyle lots (KDC Report). Site also has lapsed Concept Plan Approval (CP 06_0266) for Distribution Hub. Adjacent land zoned RU6 Transition with 20Ha LSZ. Submission has concerns that Elton's consider the site is constrained by significant areas identified as having high conservation value (Elton's also did not support other sites 11, 13 and 20) on the basis of high biodiversity value. TPG also has concerns that the EcoLogical study was a desktop study only with no ground truthing and that EcoLogical focussed their assessment on sites to the north and west of Goulburn (specifically Site 26 – Mistful Park) It also wants to be the subject of a specific biodiversity assessment to consider opportunity for offsets. TCG are of the opinion that all 39 sites should have been the subject of site-specific ecological analysis. TCG quote the DG's Assessment Report for CP 06_0266 that the subject site is highly modified and degraded as a result of clearing, grazing, pasture improvement, agricultural practices and...site supports native pasture communities of low biodiversity. TCG consider dismissal of the site for biodiversity reasons as ambiguous and request Council undertake further investigations regarding biodiversity before concluding that the entire site is not suitable for large lot residential. TCG notes the Strategy's acknowledgement of demand for LLR blocks (1,000-5,000 sqm), however note that the Strategy only

No.	Submitter/Precinct	Issues Raised
		<p>makes provision for them north of Marulan and none in Goulburn. TCG refutes that the release of Large Lot Residential land would compete with and compromise the future delivery of General and Low Density residential land. TCG consider the land at Mountain Ash Road would not conflict with the required residential greenfield sites (such as Run'O'Waters) and not compromise this delivery. They also consider that there is adequate demand whereas there was only one site (Site 10) put forward with an area of 21 Ha's (86 lot yield) and that their subject site would not necessitate discussion with numerous landowners. TCG are of the opinion that the Draft Strategy should not proceed to finalisation without further detailed investigation into the market demand. TCG considered the Strategy's Objectives, Principles and Criteria for identification of land, that there was no justification for extending the urban boundary to the north and west by the Hume Highway, while not considering extending it to the south east, apart from using the significant piece of Infrastructure (Hume Motorway) and no other limiting factor (in their view) to define clear city limits. TCG conclude that progression of an amendment to GM LEP 2009 and finalisation of the Draft GMUFHS is premature. They also conclude that investigation of ecological values is inadequate and has instead focussed on a desktop analysis of sites in the north western sector of Goulburn. They consider that the brief should be extended to include further consideration of the south eastern lands. They also conclude that the future potential growth of Site 25 should not be dismissed on the basis of ecological value alone without considering mitigation strategies which could be incorporated into a future subdivision design. TCG recite the comments regarding the Distribution Hub to support this. They reiterate that the site has a high level of accessibility and would assist in meeting the future large lot housing requirements of Goulburn.</p> <p>Response/Comment: This submission highlights the existing planning proposal initially supported by Council in 2015. At that time DPE required Council to demonstrate the need for additional rural residential land.</p> <p>DPE stated that consideration of the 2-20Ha lot delivery should be part of a review of the rural lands strategic framework.</p> <p>Council commissioned KDC to undertake a review of the supply of rural residential land 2-20Ha. This review found that there was no strong evidence to indicate that there is a higher demand for, or lack of supply of, rural residential lots in the region.</p> <p>In response to the biodiversity issues raised, it is acknowledged that the site (25) was initially eliminated based on the desktop biodiversity assessment. This has subsequently been reviewed, although still not to individual property level. To that end, however, the submission and supporting correspondence from Mecone which included a High Level Preliminary Ecological Assessment by Pat Guinane, a Senior Ecologist with Macrozamia Environmental (BAM Assessor Accreditation) undertaken in July</p>

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		<p>2019, provides sufficient evidence to conclude that the biodiversity constraints are limited.</p> <p>The remaining constraint is noise from the motor racing activities to the south west. If these issues could be overcome, the Mountain Ash Precinct has the potential to provide large lot residential development if demand is established.</p>
33	<p>Neville Burrows via Nadia Kitching Mountain Ash Rd, Goulburn</p> <p><i>This site is identified as Site 25</i></p> <p>Precinct 10 Mountain Ash</p>	<p>Requests serious consideration be given to rezone the subject land (DP70346, DP126040, DP731427, DP 779194, DP811954 and DP835278) to permit 2Ha home sites.</p> <p>This submission is basic in that it simply requests the LSZ of the above DP's be revised to allow 2 Ha lots.</p> <p>Response/Comment: Refer comment above.</p>
14	<p>John Taylor 46 Mountain Ash Rd, Brisbane Grove</p> <p><i>The suggested area for rezoning is in the vicinity of Site 25</i></p> <p>Precinct 10 Mountain Ash</p>	<p>Currently RU6 Transition LZN + 100 Ha LSZ (AD). This submission is intended to be general in nature though it suggests that land to the south of Goulburn between Braidwood Road and Lansdowne Bridge would be suitable for R5 Large Lot Residential. It also suggests that the Strategy supports the provision of rural residential housing on up to 2 hectare lots and is supported by Strategy commentary that people are choosing to relocate to Goulburn for larger lots and more space. It then surmises that the Strategy does not support larger lots.</p> <p>This submission is critical in that it does not look for opportunities for large lots, only at the sites already put forward and is sceptical of the basis for the rejection of the identified large lot sites. It also considers that Lifestyle lots will attract "Treechangers" and their demographic will boost the economy and population. The submission suggests the Strategy fails to meet the spirit of a resolution from (19) July 2016, that prioritised a rural housing strategy, by not coming up with a strategy to meet known demand for larger blocks.</p> <p>The submission concludes that he can have no confidence in making his submission when some of the data in the strategy is blatantly wrong and when things from various workshops have just been ignored.</p> <p>Response/Comment: This submission highlights the shortfall in the Draft Strategy in terms of addressing the need for additional large lot residential development opportunities.</p> <p>In response, the Strategy has been reviewed to include a more detailed Precinct based approach to the identification of housing opportunities, particularly on the urban fringe.</p> <p>The site itself is identified as having biodiversity constraints. It is also within an area identified as being impacted by noise from the motor racing activities to the south west. If these issues could be overcome, the Mountain Ash Precinct has the potential to deliver large lot residential development if demand is established.</p>
21	<p>Michelle Hazelgrove 94 Rosemont Rd, Goulburn</p>	<p>Currently RU1 Primary Production LZN + 100 Ha LSZ. Proposes mix of 5 (2 Ha), 10 (4 Ha), 15 (6Ha), 20 (8 Ha) and 25 (10 Ha) lots.</p>

No.	Submitter/Precinct	Issues Raised
	<p><i>This site is not an identified site and is in proximity to Site 25.</i></p> <p>Precinct 10 Mountain Ash</p>	<p>Identifies their holding as Mountain Ash Road, Gundry and is at the periphery of the study area. The submission advises that the subject land is in the town boundary. Near this area on Mountain Ash Rd a developer has acquired the land and wants to do 5 acre lots which are in great demand close to Goulburn. The submission states that the study says this 'area' is not to change but the submitter believes it would be in Goulburn's interest and economic development to release this area as a mix of 5, 10, 15, 20 and 25 acres close to town.</p> <p>Response/Comment: As noted above consideration of the 2-20Ha lot delivery should be part of a review of the rural land strategic framework.</p> <p>Refer to other comments above.</p>
Precinct 11 Brisbane Grove		
37	<p>Laterals 2 Brisbane Grove Rd, Brisbane Grove</p> <p><i>This is Site 11</i></p> <p>Precinct 11 Brisbane Grove</p>	<p>'Alfarthing' (Lots 61-64 DP 976708, Lots 71-77 DP 976708 and Lot 60 DP 1090981) The site is currently zoned RU6 Transition + 1Ha LSZ with an area of 34 Ha. This submission includes a number of maps including a proposed subdivision map. It is also supported by a Biodiversity Assessment prepared by Woodlands Environmental Pty Ltd.</p> <p>Response/Comment: Noted. Additional constraints assessment at the Precinct level generally supports the suitability of part of the site, but for the abattoir buffer and soil capability in terms of agricultural land. As with other Precincts, the issue will be one of demand/supply and timing. It does not follow that all land that is suitable will be identified for development in the short/medium term.</p>
Precinct 13 Garfield		
39	<p>Kingsdale Consulting Lot 4 DP 1163244 16 Nicole Pl, Goulburn</p> <p>Precinct 13 Garfield</p>	<p>The parcel is split zoned R5 and E4 with a corresponding split MLS of 2,000sqm and 8,000sqm respectively.</p> <p>Request that Council consider amending the MLS on the E4 Environmental Living zone from 8,000sqm to 2,000sqm.</p> <p>The submission highlights the generalisation of the Garfield precinct description and that this is inaccurate when considering the Nicole Place and Carr Street extent of the precinct which is much more aligned with the outer fringe areas in terms of character and land use.</p> <p>Response/Comment: Agree that the general nature of the description of the Garfield Precinct cannot be accurately applied to this area.</p> <p>Council should consider an amendment to both the zone and the MLS on the E4 zoned land fronting Carr Street having regard to the scenic amenity, environmental values and access to water and sewer as part of the consideration of the adjoining Run 'O' Waters (rural north) Precinct.</p>
Marulan		
5	<p>Tony Jabbour 321 George St, Marulan</p>	<p>Currently RU2 Rural Landscape zone and 100 Ha minimum lot size. Wants to be included in adjacent Additional Large Lot</p>

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	<p><i>This is not an identified site but is located between Site 30 and the Hume Highway.</i></p> <p>Precinct Marulan North</p>	<p>Residential Opportunity notation. Considers site suitable for inclusion in HS. Site is described as having 1km of frontage and good access to Hume Highway, power, reticulated water and phone services available, is flat and cleared of trees and has good proximity to the town centre and highway and would benefit from residential and highway retail zone uses. Excluding the land would result in it becoming an isolated 'island' site. Would like to work with Council to rezone to deliver staged housing lots and highway retail zone uses.</p> <p>Response/Comment: The revised Strategy identifies part of this site in the future urban residential land in the longer term.</p>
7	<p>Tod Anderson 194 Brayton Rd Marulan (not 152 as in submission)</p> <p><i>This is not an identified site but is between Site 30 and the urban area of Marulan.</i></p> <p>Precinct Marulan North</p>	<p>Currently RU6 Transition zone + 100 Ha LSZ. Refers to Figure 2 and proposes to extend R2 zoning to meet their land. Proposed Additional Large Lot Residential Opportunity is already over this site. Generally, supports housing strategy.</p> <p>Response/Comment: Additional Large Lot Residential Opportunity notation already covers this site. There is limited opportunity for serviced residential development in Marulan and it is important that Council prevent the fragmentation of land to the north of Marulan to the extent that it would then be unviable to redevelop in the future.</p>
24	<p>Gunlake Quarries David Kelly 540 Brayton Rd, Marulan</p> <p>Precinct Marulan North</p>	<p>Currently RU2 Rural Landscape + 100 Ha LSZ. Submission raises concern regarding proximity of Additional Large Lot Residential area to Ambrose Road Heavy Haulage Route used by Gunlake. This concern is raised in the context of the Mining, Petroleum Production and Extractive Industries SEPP 2007, Ministerial Directions (117's) and the South Eastern Tablelands Regional Plan (SETRP) which all have the objective that "future urban land does not encroach on existing mineral resources" (Direction 13 SETRP). Their concern is not only regarding the impact that their operations will have directly on future urban land uses (i.e Residential) but also the likelihood that these land uses will seek to connect to the Hume Highway via Ambrose Road. Gunlake state that this road is used 24/7 and is the direct link between the quarry site and the Hume Highway. Further this link road is intended to 'keep the vast majority of quarry traffic out of and completely avoid' residential land uses in and around Marulan. Gunlake further state that they are required to pay Contributions under Council's S94 Plan whereas this road was 'built and constructed' by Gunlake, who also upgraded the intersection with the Hume Highway. Both of these actions were at their own volition. This identified transport route is now approved as an SSD consent (June 2017) for a maximum of 490 tm/day and any encroachment on this route would create a land use conflict that would sterilise a SS resource.</p> <p>The submission from Gunlake notes that there was no identification of the Gunlake Quarry or transport route to the proposed urban expansion area. Gunlake also notes the HS Criteria that urban expansion should avoid mineral resource locations. To this end Gunlake supports the recommendation to reject Site 18 from the Opportunity Sites list and also strongly recommends the support for Sites 30 and 33 be reconsidered.</p>

No.	Submitter/Precinct	Issues Raised
		<p>The submission from Gunlake provides 6 Criteria that could be adopted for site selection of current & future residential/urban land release areas.</p> <p>Response/Comment: Noted. The haulage route to the north connecting to the Highway has been identified at a precinct level. Additional constraints mapping has been shown to identify the mineral resources. Should development occur DCP controls for setbacks and limited access to haulage routes for subdivisions could be included.</p>
26	<p>Leonida Beltrame 307 George St, Marulan</p> <p><i>This site is not an identified site but is located between Site 30 and the Hume Highway.</i></p> <p>Precinct Marulan North</p>	<p>Currently RU2 Rural Landscape LZN + 100 Ha LSZ. Proposes R5 Large Lot Residential LZN as per adjoining 'Additional Large Lot Residential Opportunity' land to the north west. Extensive frontage to Hume Highway. Surrounding neighbours have been included. Wants to know how her land can be included.</p> <p>Response/Comment: The Marulan North Precinct has been refined based on additional constraints mapping. Part of this site has been included.</p>
34	<p>Divalls 21 Wilson Drive & Portland Avenue, Marulan</p>	<p>Industrial precinct and abutment of Residential and Industrial uses (quarrying) at Suffolk Road, Marulan (docs #1105513 + 1105449):</p> <p>21 Portland Avenue is currently zoned IN2 General Industrial (+Nil LSZ).</p> <p>Submission wants to rezone this site IN1 because it appears to permit businesses such as 'Camcast' (?). They state IN1 land to the north adjoins residential and this to them appears 'back to front'.</p> <p>Response/Comment: Noted</p>
29	<p>Tomasy Planning</p> <p><i>This site is known as "Glenrock"</i></p>	<p>248 Highland Way (and Long Point Road) Marulan: Currently RU2 Rural Landscape + 100 Ha LSZ. Wants to be included in Strategy area and proposes Rural Residential development along Highland Way and Long Point Road. Submission refers to 'Glenrowan Green' (32 Caoura Rd Tallong) as comparable Subdivision. Glenrowan Green is RU5 Village LZN and 700 sqm LSZ. There is a 40 Ha and 10 Ha LSZ between the two properties. Requests inclusion in strategy as growth corridor between Marulan and Tallong. Makes 11 points in support of request. Site is not in close proximity to Marulan or Tallong. Site is not in proximity to other recently approved Subdivisions (referring to Glenrowan Green). Road frontage allows direct road access and can provide services without additional roads. Low bushfire risk (based on dated maps). Submission notes Ingleside was deferred from urban residential for bushfire reasons (the site is bushfire prone under new maps). Subject land is cleared of vegetation enabling development without interference with vegetation, natural species or flora and fauna. Site is natural growth corridor. There is already a substantial number of rural residential developments, like Caoura Road, so would be consistent with existing character. Proximity to main southern railway line. Single ownership means land can be cohesively developed. Site has the ability to meaningfully add to the housing stock.</p>

No.	Submitter/Precinct	Issues Raised
		<p>Response/Comment: This site is considered too remote to be reasonably considered as part of the Urban and Fringe Housing Strategy. Sufficient land has been identified within the immediate study area without the need to consider the suitability of more removed land.</p>
General		
18	Doug McIntyre	<p>General (development of north Goulburn): The submission states allowing future land releases towards Crookwell is not balanced and further makes the CBD the edge of Goulburn. Doug considers land on the southern side of Goulburn (the abattoirs and old wool washing site) is ideal for regeneration through urbanisation but these areas have been ignored.</p> <p>Doug also considers that the release of more land towards Crookwell does not take into account the impact on Crookwell residents who have to navigate through Goulburn on a regular basis. He suggests that a direct bypass to the highway from the Crookwell Goulburn Road, instead of navigating the maze of Goulburn back streets, needs to have serious consideration.</p> <p>Comment/Response: The Strategy considered a range of constraints both natural and built to development in making recommendations in relation to the most suitable growth areas. Despite the perception of distance from the centre of Goulburn, the norther part of the city is the most suitable for future development.</p>
20	Justin Kell LandTeam	<p>Generally supportive.</p> <p>Submission suggests an area for Open Space (Site 26) while the HS makes little or no mention of complementary land uses (Commercial and Open Space LZN).</p> <p>Submission suggests the identified growth area of North Goulburn should be separately named to separate its identity from the remainder of Goulburn. It also suggests that Greenfield development is not for everyone but acknowledges that it should be in suitable areas.</p> <p>Response/Comment: Noted. In order to meet the housing demand to 2036 there will need to be a mix of infill and greenfield development.</p>
31	Trevor Ronald Lloyd	<p>General (Transport & Repurposing Shop fronts for Seniors Housing): This submission considers that Goulburn will increasingly become a dormitory suburb for Sydney and Canberra and the need for improved access to transport hubs from surrounding areas for onward movement to their final destination (e.g. Sydney and Canberra). It continues in liking to see a reasonably thorough discussion and proposals for the shire's transport requirements included in the HS. It recommends an 'easement' requirement for light rail, driverless cars and buses, particularly in support of major new subdivisions and smaller villages e.g. Crookwell, Tarago, Taralga and Marulan. Consideration of existing but unused railway easements should also be included.</p>

No.	Submitter/Precinct	Issues Raised
		<p>It accepts coordination with NSW Planning Departments and asks ‘what is the regional transport plan for NSW?’ The submission considers that retailing is a failing industry and suggests that contemporary retailing establishments could be repurposed to accommodation to bring much needed community activity to the centres of towns/villages. He considers that repurposed shopfronts could be used for the elderly as the shopfronts are generally close to public facilities such as hospitals and shopping precincts. For example, the single level Goulburn shopping malls could be redeveloped as multi story (sic) developments with residential dwellings above – such centres are more valuable for residential purposes than retail and are close to transport hubs and public facilities. Commercial interests will have views that merit transparent consideration. Because he’s away from Goulburn much of his time, he thought the timeframe for discussion was very short and had not noticed any discussion regarding the housing Strategy in the local press.</p> <p>Response/Comment: Noted. Recommended increase in density of housing in the centre of Goulburn via additional R3 Medium Density zone.</p>
32	Anglicare & Argyle housing	<p>Affordable and Social Housing: This submission provides a short history of Anglicare and Argyle’s involvement in the Goulburn and wider community and a snap shot of the current housing market for these sectors. An attachment shows waiting times for housing in Goulburn as:</p> <ul style="list-style-type: none"> 1 bdrm 10+ years 2 bdrm 5-10 years 3 bdrm 2-5 years 4 bdrm 5-10 years <p>The submission is summarised by recommendations including the following:</p> <ul style="list-style-type: none"> » Simplify Council development approval process for affordable housing Development Applications and provide additional advisory services to assist ‘first-time’ compliance, » Promote the positive social and commercial impacts of affordable housing within the community to reduce NIMBYism (Not in my back yard), » Council adopt a fee structure for community housing developments to ensure affordable housing developments are financially viable. This should include: <ul style="list-style-type: none"> > A reduced upfront fee regime exclusively for construction and ongoing management costs of what should be considered community infrastructure (S94 and related Contributions) including Retirement Living proposals that are for affordable retirement living. > Development approval provisions for the inclusion of any appropriate restriction on land title for Council to seek cost recovery of S94 and related contributions should the land revert from affordable or community housing to the general market,

No.	Submitter/Precinct	Issues Raised
		<p>> Significantly reduced ongoing rates, fees and other charges which are an impediment to viable affordable housing developments;</p> <p>» Council enter construction and or management partnerships with registered community providers by enabling providers to build on Council owned land under a tenant-in-common type arrangement. The land would remain in Council ownership. This may include conversion of existing Council owned buildings;</p> <p>» Through the planning mechanism, support development bonuses which deliver increased affordable housing outcomes,</p> <p>» Establish a monitoring system to track the increase/decrease in affordable housing over the life of the strategy.</p> <p>Comment/Response: Noted. There is scope for Council to prepare an affordable housing policy as part of a suite of policy documents to support the delivery of more suitable housing.</p>
10	David Penalver Goulburn Heritage Group	<p>General Heritage Conservation Area:</p> <p>a) Stresses the need for a clear final strategy that prevents damage to existing highly vulnerable inner urban environment close to CBD.</p> <p>GOULBURN'S HERITAGE CONSERVATION AREA: Encourages shop top housing restoration – bring life to CBD while catering for younger people, singles and those without cars. Agrees with 3 storey apartment living in B3 zone but not facing heritage streetscape. B4; GHG members deplore the current spread of detached villa housing (appearance, impact and no investment value). Supports appropriate medium density residential opportunities. Wants DCP controls in B4 and proposed R3 with site coverage ratios are established to encourage attached 2 storey town housing with garden/courtyard for space. Establish attractive garden spaces within B4 area important to city streetscape, with new townhouses blend sympathetically into their surrounds. Implement Housing policy, with open space DCP guidelines as soon as possible.</p> <p>OBJECTIVE:</p> <p>Disagree with suggestion Council might allow housing proposals to be considered where no urban design guidelines have been set. This is an abdication of Council's responsibility to provide fair and reasonable guidelines necessary for a developer to know before any project is started. GHG's experience is that it is impossible to raise design standards when project is already on the drawing board. Where guidelines have not been set, or design standards set, Community values continue to be lost at the expense of allowing a developer's wish for financial gain to be met.</p> <p>OUTER FRINGE AREA:</p> <p>Extension of outer fringe w/o Major transport link through the existing settlements will create problems in future. Important that the expansion of the urban fringe does NOT include satellite service precincts that would negatively impact on the economic viability of the CBD. Much of the population. growth</p>

No.	Submitter/Precinct	Issues Raised
		<p>is from tree changer's escaping stress of crowded suburban lifestyle: people looking for charm with space for hobbies, a diverse range of housing types needed for 'well off' retirees and those needing smaller, affordable compact units where access will be essential. Provision for larger lots has not been addressed.</p> <p>Supports not straddling Hume Highway and notes inefficient land use at Duck's Lane but notes land south of Goulburn suitable for R5 zoning. Land to the south is near CBD and has been provided easy access via Lansdowne Bridge and Braidwood Rd (and is closer than Marys Mount or Run'O'Waters to CBD).</p> <p>Wishes the Strategy success.</p> <p>b) General - Goulburn Heritage Group support ALL strategies and policies currently on display for Goulburn. Many overlap but hope for a coordinated successful result linking each one. CBD Beautification – supports all four particularly cutting off Market Street and replacing with a pedestrian walkway. Traffic also an issue that GMC must seriously face (whether underground or multi-storey) – <i>needs an inspiring vision for this very important heritage city in 20 years' time.</i></p> <p>Response/Comment: Council is reconsidering extent of existing conservation area to the north of the CBD, to provide more opportunity for less intact streetscape.</p> <p>Agree with providing more rigorous controls for better outcomes including urban design guidelines but these should be in DCP.</p> <p>Transport links and more efficient use of infrastructure will be considered in the planning for urban release areas and future zoning.</p>
11	Mhairi Fraser The Goulburn Group	<p>General: TGG advocates for sustainable development that prioritises biodiversity, social amenity and liveability, heritage values and adaptation of the built environment to climate change.</p> <p>Marys Mount</p> <p>a) URBAN DESIGN STANDARDS:</p> <p>Council must adopt urban design guidelines as a priority. Including reducing the reliance of new dwellings on 'active' heating and cooling. Location is an example of poor urban design with houses built right to the perimeter making it difficult to plant trees and shrubs for shade and wind protection. Privacy is an issue for many due to close proximity. Colorbond fencing is ugly and absorbs heat in hot weather.</p> <p>Many roofs are dark colours (heat absorbing), without adequate insulation, temperatures inside these homes are huge. This type of development requires revision from both aesthetic and climate change point of view. Building materials and design should take into account energy efficiency and solar passive design principles (including aspect, building materials, eaves and landscaping), as a minimum insulation and solar hot water. The price point of new dwellings should include the cost of heating</p>

No.	Submitter/Precinct	Issues Raised
		<p>and cooling after purchase. This would encourage a shift in building practices towards sustainable homes and liveable communities. It's crucial that Council adopts urban design standards that include the above solar passive design principles along with precinct linkages and amenity.</p> <p>b) LIVEABILITY AND LINKAGES:</p> <p>Strongly applaud the reference to cycle paths, green spaces and footpaths and attention to biodiversity corridors across the urban.</p> <p>Central Goulburn</p> <p>a) GENERAL: In principle support for a mix of housing as in-fill development in the CBD, however some examples to date have not been sympathetic to the Heritage nature of Central Goulburn (e.g. Clinton Street and Marion College) and resulted in bad outcomes from a visual amenity perspective (no sympathy between heritage context and unit complex). The height now blocks the view of the cathedral from Clinton Street. Verner St and Cowper Street developments are sympathetic and demonstrate (roof lines and design compatibility) they can be done properly.</p> <p>b) HEIGHT OF BUILDINGS: TGG feel very strongly that height levels should not be increased in Goulburn. Skyline and vistas are beautiful and the Post Office, Cathedrals and Uniting Church (and chimney pots) can all be seen from many vantage points and are what makes Goulburn attractive. Council at times appears ambivalent and sees heritage as an obstacle rather than an asset that attracts visitors. Retrofitting heritage buildings is a challenge but one that can be resolved by following other leads (Bendigo, Ballarat, Bathurst etc.). Retrofitting could see new industries develop in the region.</p> <p>c) LOSS OF URBAN HABITAT: Infilling in Central Goulburn should not create another Marys Mount where houses are built to boundaries and loss of space for trees and landscaping. Central Goulburn has lots of green space and urban backyards, mature street trees all of which contributes to our biodiversity, shade in summer and wind protection in winter and spring (microclimates).</p> <p>Response/Comment: The issues raised in the submission are noted. While the Housing Strategy addresses the land requirements, the review of the more recent development has highlighted the need for a more structured and planned approach to the development of urban release areas to deliver better planning outcomes.</p> <p>No development should be allowed to occur without a detailed concept plan that includes servicing, road hierarchy, open space networks and connectivity back into the town centre.</p>
38	James Fuentes	<p>This is a general submission asking the following questions.</p> <p><i>When will this (the Housing Strategy?) be endorsed?</i></p> <p><i>And will the public see the final Urban and Fringe Strategy before it's submitted to State Government for endorsement?</i></p>

No.	Submitter/Precinct	Issues Raised
		<p><i>Is there any significant changes in terms of Large Lot Residential inclusions in the Goulburn fringe (R5)?</i></p> <p>Response/Comment: the Strategy will likely be endorsed later in 2019. The amendments following the exhibition have been in response to comments made. Council will determine how these will be communicated and whether additional feedback will be sought.</p>

Figure 1 Submissions – Goulburn**Legend****Precincts**

Urban

Fringe

Submission

G - 1	Run 'O' Waters (existing)	G - 9	Mt Gray East	G - 17	Eastgrove
G - 2	Run 'O' Waters (rural north)	G - 10	Mountain Ash	G - 18	Central Goulburn
G - 3	Baw Baw	G - 11	Brisbane Grove	G - 19	Ifield
G - 4	Sooley	G - 12	Abattoir	G - 20	Correctional Centre
G - 5	Middle Arm West	G - 13	Garfield		
G - 6	Middle Arm East	G - 14	West Victoria Park		
G - 7	Kenmore	G - 15	Marys Mount		
G - 8	Gorman Rd	G - 16	Bradfordville		

Figure 2 Submissions – Marulan



Legend

Precincts

Urban

Fringe

Submission

M - 1 Marulan Town Centre

M - 2 Marulan South (now Marulan East)

M - 3 Marulan North

M - 4 Marulan West

4.3 Summary of Agency Submissions

Additional engagement with Government agencies was undertaken during the first exhibition of the Draft Strategy and, together with public feedback outlined above, has informed this revised Draft Strategy. Agency submissions are summarised in **Table 3** below.

Table 3 Pre and during Exhibition Agency Consultation

Agency	Issues Raised
APA HP Gas Pipeline	<p>The proposed Urban Expansion Area was over their asset. The assets have a (max) 675metre (ML – Measurement Length exclusion zone) clearance requirement.</p> <p>This easement does not preclude development but requires strict controls. Sensitive land uses are not supported within the ML.</p>
Department of Primary Industry (6 June 2018)	<p>They suggest referring to the publication <i>Living and Working in Rural Areas</i> handbook and <i>Right to Farm, Maintaining Land for Agriculture</i> and <i>Sustainable Agriculture</i> policies which consider land use conflict, agricultural land use protection and sustainability of agriculture.</p> <p>Generally supported urban housing types such as town houses, apartments and small style housing options and these will provide more affordable housing options to meet part of the demographic demand.</p>
Department of Primary Industry (2 November 2018)	<p>NSW DPI supports town houses, apartment and small style housing options and consolidating smaller size housing options into the existing town blocks. This type of housing will take up less land and enable greater amount of land to be used for food production.</p> <p>The neighbourhood planning principles (p27) could benefit from the inclusion of a statement about the use of buffer areas or separation distances between the rural and urban boundary to reduce land use conflicts.</p> <p>The urban expansion principles 9 (p32) refer to prime agricultural lands. The inclusion of important agricultural land mapping in that paragraph would enable the NSW DPI work to be recognised in those principles.</p> <p>While the release of lots in unsewered areas provides large lot residential development, it also results in larger area of land being consumed for residential purposes.</p> <p>The area proposed for urban and rural residential release are noted. The following is submitted:</p> <ul style="list-style-type: none"> » Areas adjacent to existing urban or rural residential development is accepted as appropriate area for housing development. » There are a number of areas that appear to be isolated lots not immediately adjacent to urban areas that are proposed for release. It is unclear why they are included in the residential release. They are: <ul style="list-style-type: none"> > The area around Boxers Creek Road > 3 northern lots along Chinamans Lane > 3 isolated lots to the south west along Range Road,
Water NSW (5 November 2018)	<p>WaterNSW provided the SLWCA maps and reiterate their observations with regard to the identified areas in Figure 1 and 2 of the HS:</p> <p>For the proposed Marys Mount area, Water NSW identified:</p>

Agency	Issues Raised
	<ul style="list-style-type: none"> » High to Extreme for Residential Unsewered 2,000-4,000 sqm lots, » Mostly extreme for Residential Unsewered 4,000 to 2 Ha lots particularly in northern release area, » Mostly Low to Moderate for Residential Sewered development <p>Water NSW state that the Ministerial Direction 5.2 SDWC is still only given limited attention in the Draft Strategy (p19,29) and recommend that the subsection on 'Sydney Drinking Water Catchment' on p29 be prefixed by the term 'Ministerial Direction 5.2' so that Council, developers and consultants can readily identify the Direction and its provisions. This Section would benefit by including the general principle that water quality within the SDWC must be protected, and by including the following key principles of the Direction:</p> <ul style="list-style-type: none"> » New development within the Sydney drinking water catchment must have a neutral or beneficial effect on water quality » Future land uses in the Sydney drinking water catchment should be matched to land and capability <p>The above would then provide a clear legal pathway for consideration of the Strategic Land and Water Capability Assessments.</p> <p>Other Issues</p> <p>Figure 1 and 2 would benefit by clearer differentiation of the proposed urban expansion areas and zoning intent without text truncating important boundaries (e.g. Environmental Constraints text truncating the boundaries of the Low Density Residential Zone in Marys Mount).</p> <p>The Urban Investigation area along with deferred sites 2, 12 (in part), 28 and 21 drain towards Lake Sooley (Sooley Dam). Other issues with stormwater management may also likely arise in any development on these lands. Whilst this water reservoir is not managed by Water NSW, Council may wish to consider the suitability of these sites for urban development, particularly if it is to be unsewered, given their proximity to the reservoir and the possible effects on Goulburn's water supply.</p> <p>The Draft Strategy makes reference to the Seniors Housing SEPP on p24 and p119. The Housing Seniors SEPP does not apply to the Sydney drinking water catchment. This should be clearly stated in the final strategy.</p> <p>Seniors housing is regulated by the provisions of Council's LEP 2009 and is only permissible where it is allowed by the zoning.</p> <p>WaterNSW is supportive of the inclusion of Direction 1: Secure water resources (SETRP Direction 18 – p128) which aims to protect the Sydney drinking water catchment. We particularly note the recognition of Neutral or Beneficial Effect test (NorBE), the need for up to date water cycle management strategies, and the application of Water Sensitive Urban Design principles. Minor corrections are however required. In the 'Implementation Outcome', reference to SWC needs to be replaced with 'Sydney Drinking Water Catchment' and the responsibility placed on Council and Water NSW (not SWC).</p> <p>Further alignment of the proposed release areas with the results of the SLWCA's will help reduce water quality risks arising from new development, and associated costs borne by developers at latter stages in the planning and development process.</p>

Agency	Issues Raised
<p>Water NSW (1 March 2019)</p>	<p>For Goulburn</p> <ul style="list-style-type: none"> » Low to Extreme for Residential Unsewered 2,000-4,000 sqm, with extreme and high risks consistent with drainage lines, » Mostly Low to Moderate but some High and Extreme for Residential Unsewered 4,000 sqm to 2Ha » Mostly Low and Moderate for Residential Sewered lots. <p>For Marulan</p> <ul style="list-style-type: none"> » Residential Unsewered development 4,000 sqm to 2 Ha – predominantly High to Extreme risk except in the south east where the risk is Low » Residential Unsewered development 2,000 – 4,000 sqm – predominantly High to Extreme risk except in the south east where the risk is Moderate » Residential Sewered development – generally Low to moderate risk <p>For Goulburn they particularly note that Site 39 is highly constrained in terms of water quality risk. Much of the land is identified as high to extreme risk as based on the SLWCA's for unsewered 2,000-4,000sqm + 4,000 to 2Ha allotments. This indicates that this site is best suited to reticulated sewer if it is to be developed.</p> <p>For Marulan, including deferred Site 30, areas in the north of the urban expansion area have high and extreme risks for water quality for unsewered development, particularly Lot Sizes 2,000-4,000sqm. The proposed opportunities for R5 Large Lot Residential and RU6 Transition as suggested on Figure 2...may not be suitable if the allotments are to be unsewered. Water NSW recommends that any residential development in these areas should be preceded by reticulated sewerage. This further supports the need to upgrade Marulan STP.</p> <p>SEPP's Directions and Codes</p> <p>They note and support the inclusion of the brief summary of the SDWC SEPP 2011 on p23, however, the last paragraph should be amended as the SEPP only applies to land occurring in the SDWC and therefore does not technically apply to any or all land as currently stated. Water NSW also state that this section on the SEPP would also benefit by stating three key provisions i.e. giving effect to:</p> <ul style="list-style-type: none"> » Water NSW's current recommended practices and standards, » Requirement for all development within the SDWC to have a Neutral or Beneficial Effect on Water Quality (NorBE), and » Referring development applications (and Planning Proposals) to Water NSW for concurrence where so required.
<p>Office of Environment and Heritage (Ecology) 29 March 2019</p>	<p><i>In addition to submission received, Council met with OEH staff on 27 March 2019 and an OEH Flood Engineer visited sites at Goulburn and Marulan on 9 April 2019.</i></p> <p>Biodiversity Certification is a strategic assessment process available under the Biodiversity Certification Act 2016. This would help ensure that future developments do not experience some of the land use conflicts that Council and proponents have experienced in some recent residential subdivisions.</p> <p>Prior to any rezoning resulting from the Strategy, OEH would encourage Council to commence preparing a Goulburn Local Overland Floodplain Risk Management Study and Plan to strategically manage both existing and</p>

Agency	Issues Raised
	<p>future flood risk such as those associated with the proposed urban release area and opportunity sites.</p> <p>No flood study has been undertaken for the Marulan area. Jaorimin Creek is noted to pass through the proposed urban release area as well as at least one of the Marulan opportunity sites and will have associated flood constraints. These should be investigated through preparation of a flood study prior to areas being rezoned for residential purposes.</p> <p>OEH considers that not only new residential opportunities should be identified by the strategy. The high conservation value land identified in (sic) strategy background reports should be zoned for environmental zones where not currently zoned for more balanced strategy outcome.</p> <p>OEH note the key action of the SETRP to protect validated high environmental value lands in LEP's 14.2.</p> <p>There are some patches of EEC (Box Gum woodland) identified in Urban Expansion Areas. These are identified in HEV layer for SETRP.</p> <p>Of particular note, Biodiversity Certification (BC) (under the BC Act 2016) offers a streamlined process for areas marked for development at the strategic planning stage. This process identifies areas of high biodiversity value at the landscape scale so as to avoid and protect while also identifying areas suitable for development (from a biodiversity perspective).</p> <p>After BC is conferred on an area of land, development may proceed without further triggering the Biodiversity Offset Scheme (under BC Act 2016). This gives Council and proponents greater certainty that biodiversity issues have been addressed ahead of subdivisions.</p> <p>Recommending a comprehensive Aboriginal Cultural Heritage Assessment. These studies are consistent with Direction 23 of the SETRP 2036 and would provide greater certainty for stakeholders in any development assessment process.</p> <p>OEH note the 2012 studies and 2009 DCP identifying areas containing Aboriginal significance. OEH suggest that if any areas are present, an appropriate zoning should be put in place to allow for impacts to be avoided. They note Site 19 (Ducks Lane) and Site 7 (Rocky Hill area) have known ACH sites.</p> <p>Floodplain Risk Management</p> <p>Comments in this part reiterate the above and particularly emphasising Section 9.1 Direction 4.3 Flood Prone Land.</p> <p>General Flooding Summary</p> <p>OEH specifically note the following issues specifically identified in the Urban and Fringe Housing Strategy report:</p> <ul style="list-style-type: none"> » Flooding constraints do not appear to have been adequately identified in the Draft Urban and Fringe Housing Strategy 2018 (the strategy) » Of the 8 planning precincts identified in the strategy, all but one are affected by riverine flooding (as per Council's Wollondilly and Mulwaree Rivers Flood Study (2105)). Major overland flows were not assessed in the flood study, which are yet to be assessed for each of the precincts. » However flooding is only mentioned for the "Eastgrove" precinct, in which the strategy notes that this area lies above the floodplain of the Mulwaree River. This is contrary to Council's flood study (2015), which

Agency	Issues Raised
	<p>shows around 50% of the Eastgrove area within the floodplain with a history of flood affectation.</p> <ul style="list-style-type: none"> » The strategy shows “Goulburn Flooding” extents in Figure 23, which are inconsistent with those presented in Council’s Flood Study (2015). » Various opportunities and constraints are discussed in Table 24 of the strategy, including for climate change and flooding. However the implications of climate change on flooding are not mentioned. The report notes significant flooding constraints on the Wollondilly River, however significant flooding constraints associated with the Mulwaree River are not discussed. » Appendix F provides a map of flooding constraints and sites for rezoning in Goulburn. The constraints presented are inconsistent with those illustrated in Council’s Flood Study (2015). » The full extent of flood prone land and the potential impacts of climate change have not been considered or assessed.
Rural Fire Service 10 December 2019	<p>The Rural Fire Service referral requested detailed studies addressing evacuation routes and Asset Protection Zones.</p> <p>Note from Council: The parameters of a detailed study suggested matters that would be addressed at a rezoning or development application stage. The key area at the Housing Strategy level is that housing is not located in isolated settlements separated from the existing urban area. This is a criteria that is being considered within the Housing Strategy.</p>
Department of Planning and Environment (email 7 November 2018 and submission 22 February 2019)	<ul style="list-style-type: none"> » Separate the previously identified sites from the HS » Direction 2.1 Environmental Zones (which applies to environmentally sensitive land regardless of the zoning) and Direction 5.10 implementation of Regional Plans are also relevant Section 9.1 Directions that should be added to Section 2.3 Ministerial Directions. » It suggested (sic) to also refer to the Government’s official population forecast for Goulburn and Marulan (refer to https://www.planning.nsw.gov.au/Research-and-Demography/Demography/Populationprojections?acc_section=2016_nsw_population_projections_data). It is noted that the official Government population forecasts of 34,000 people by 2036 is less than the population forecast provided by ID the Population Experts. This is due to different methodologies used. It is considered that both forecasts methods are valid and provide useful information for planning purposes. » The section on infill housing in Marulan (Section 3.3.1 Current and planned housing) could also refer to the recommendation in the endorsed Goulburn Mulwaree Employment Land Strategy to rezone Thoroughfare and Austin Streets B1 Neighbourhood Centre to R1 General Residential (and also Long Street – adjacent to Sydney Road - in East Goulburn). The actions of the EL Strategy concerning the need to address traffic issues in Marulan could also be referred to. » The first sentence in Section 5.1.7 Goulburn Existing Urban Area (p104) is unclear/needs clarification.
Council Heritage Advisor (Louise Thom)	<p>The proposed R3 in the HCA is in an area dominated by highly intact Federation, Victorian and Inter-War buildings. This location has very little tolerance for change.</p>

Agency	Issues Raised
	<p>Medium density development would find it difficult to achieve the objective 'To conserve and enhance heritage significance...' in the proposed R3 zoning.</p> <ul style="list-style-type: none"> » The west and south parts of the HCA would pose potential land use conflicts and the controls contained in S3.3.5.7 are not compatible with medium density development. » In the proposed R3 area, medium density development would only be possible with the amalgamation of and retention of the historic houses at the front. This would need to strictly follow the objectives and controls of the DCP. » Lot amalgamation and boundary adjustments to Heritage items within the HCA should be prohibited. Heritage items should be significant enough to retain all their features including subdivision pattern. » The proposed R3 medium density zoning is likely to be contrary to the objectives and controls of the DCP which is to conserve the heritage significance of the HCA. The level of change required to achieve medium density would erode the principle characteristics of the HCA.
Council	<p>On 19 March 2019 Council resolved to:</p> <ul style="list-style-type: none"> » Support the rezoning of land at Marys Mount (Mistful Park) from B1 Neighbourhood to R3 Medium Density with a Minimum Lot Size of 1,500 sqm, and » Rezone in Marulan from B2 Local Centre to R1 General residential with a LSZ of 700 sqm, and » The GM DCP in relation to commercial and <i>medium density housing</i> is to be amended.
OEH (Heritage)	<p>Heritage have made a submission strongly recommending that Council undertake a Heritage Study - 7 Nov 2018.</p> <p><i>Council does have a Heritage Study which was finalised in January 2018 which reviewed earlier heritage studies undertaken for both Goulburn and Mulwaree Councils. A copy is on Council's website.</i></p>
Essential Energy	Identifies location of electrical infrastructure
DPE Housing Strategy Guidelines	Document has been updated in line with guidelines.

4.4 Clarification

The objective of the Strategy is to identify land suitable to meet the housing needs of Goulburn and Marulan to 2036. Fundamental to this Strategy is the need to identify land which is potentially suitable for **urban residential use** in both the short to long term, to ensure the preservation of this area for the future orderly growth of the towns to occur. Council provided a "study area" which included the existing urban areas of Goulburn and Marulan and also identified the extent of the urban fringe. The Strategy focus was generally contained to this area, however, where, due to contiguous ownership, or where properties straddled the "fringe", the Study area was expanded to include these areas.

In addition to this, Council sought a high level review of a number of sites that had been identified by individuals seeking re-zoning of land. These were referred to as Opportunity Sites.

This was a secondary aspect to the Strategy, as the sites have been nominated by owners over time and were not identified as a part of a strategic growth strategy for either urban expansion or for rural residential development. The number of various public requests for rezoning in part necessitated the need for the broader housing strategy to occur to ensure that development occurred in an orderly and economic pattern that considered the broader constraints and opportunities available on the fringe of both Goulburn and Marulan.

The process of identifying the most suitable land for residential expansion and the assessment of Opportunity Sites were two different processes. The Key Sites were not a starting point. The criteria for determining residential expansion were:

- » Consideration of environmental constraints
- » Contiguity with existing urban areas and ability to sequence development
- » Access to reticulated water and sewer
- » Scale in terms of the ability to deliver a significant residential area rather than isolated pockets of development

The ability of the existing planning controls to absorb development; in the form of higher densities e.g. Dual occupancy and multi-dwelling housing or re-subdivision e.g. subdividing all residential land to achieve the current minimum lot sizes was also considered. In the context of a regional community, given the availability of land, desire for space and current planning framework, greenfield development is likely to be the preferred and more feasible option for developers. Therefore, while consideration of the opportunities to accommodate more people in the existing urban area are an important part of the Strategy, the key focus is new development areas.

Rural Residential Development

Rural residential development, regardless of the zone, is land developed primarily for residential purposes and not connected to reticulated water and sewer.

This form of development was initially considered in the background research undertaken as part of the investigation of development areas. However, the Strategy focus was on serviced land as a priority because:

- » There is a need to provide for up to an additional 2,750 residential dwellings in the urban fringe of Goulburn (assumed that 250 could be accommodated as infill in the existing urban area).
- » The land in the urban fringe area is highly fragmented, particularly in the west and this impacts the economic and orderly development of land. Further, fragmentation would limit the potential long term expansion of Goulburn and may lead to a reduction in growth in the City as developers look elsewhere.
- » There is the opportunity for further rural residential development under the current planning controls.
- » Environmental constraints limited the development potential of large areas of land within the urban fringe.
- » It is a form of development that is inefficient in terms of the land requirements and does not make a significant contribution to land supply.
- » Goulburn and Marulan both have ageing populations and an increasing number of lone person households. Current housing stock is predominately 3 bedroom detached dwellings and at odds with anticipated demand.

Given the overwhelming interest in this form of development through the first exhibition process, it was decided that further investigation into rural residential development needed to be considered.

4.5 Key Issues First Exhibition

The majority of submissions received by the community were from individual land holders seeking inclusion in the Strategy to allow subdivision for rural residential development. In support of this position the key issues raised are summarised in the following table. The table also includes a comment by way of response.

Table 4 Key Issues

Issue	Response
Accuracy of Biodiversity and other constraints mapping	<p>This issue was raised by a number of submissions, including some who had prepared site-specific biodiversity assessments.</p> <p>Post Exhibition, EcoLogical Australia undertook a further assessment of the known biodiversity constraints based on data available from the Office of Environment and Heritage. Following a desktop assessment of the High Environmental Value (HEV) land mapping, an ecologist from EcoLogical Australia and OEH undertook observations of areas in the urban fringe that may be otherwise suitable for urban development and to determine where subsequent degradation of native vegetation has occurred since the publication of existing data sets.</p> <p>The updated Biodiversity Report and mapping has been used in the revised Strategy.</p>
Failure to provide Rural Residential Development Opportunities	<p>The land around both Goulburn and Marulan is highly constrained by both natural environmental constraints, including flooding and biodiversity as well as built form or land use constraints, for example the gas pipeline to the north of Goulburn, abattoir or mineral resources exclusion areas as in Marulan.</p> <p>In addition it was initially understood that there was capacity in the current planning controls to accommodate some growth in rural residential development.</p> <p>Subsequently, more of the previous analysis has been incorporated into the Strategy document.</p>
More detail in the consideration of the Urban Fringe	<p>Many of the submitters expressed a view that the consideration to preferred options was too narrow.</p> <p>Others who were outside the Opportunity Areas were also seeking inclusion.</p> <p>In response, a precinct based approach has been taken. This allows for more accurate understanding of site-specific constraints and opportunities.</p>
Range of Lot Sizes	<p>There were a range of lot sizes proposed as being suitable for rural residential development.</p> <p>Council needs to ensure that there is sufficient land available for serviced residential development to accommodate growth both to 2036 and beyond. Both Marulan and Goulburn are very</p>

Issue	Response
	<p>constrained. Failure to protect the urban fringe from fragmentation will inhibit the long term growth of Goulburn.</p> <p>It is extremely difficult to re-subdivide a rural residential area (for example Ducks Lane/Run'O'Waters), once it has been developed. The current LEP identifies the RU6 Transition zone to protect land from fragmentation.</p> <p>The RU6 Transition zone, therefore, is the starting point for consideration of land for urban purposes and subdivision of these areas below 10Ha should be discouraged unless a Development Control Plan is in place that will guide the orderly and economic delivery of services and infrastructure.</p> <p>Allowing 1-2 Ha and up to 5Ha rural residential lots throughout the urban fringe will not address the future housing needs.</p> <p>Goulburn will need to accommodate an additional (up to) 3,500 dwellings to 2036. If these are to be in the form of 1-2Ha Council would need to provide up to 7,000 Ha for this purpose.</p>
Need for Clarification of Criteria	<p>There are criteria for the identification of greenfield sites, however, submissions had a focus on rural residential development.</p> <p>Additional criteria have been developed to inform the decision making process in terms of considering the Opportunity Sites. In particular, reference to the RU6 Transition zone and establishing that the proposal will not prevent key sites from future development. The Strategy notes that these criteria could be used to assess future applications for rezoning.</p> <p>This is not designed as a full assessment tool. Each site will need to be considered in merit and Council cannot refuse to accept a Planning Proposal to rezone land. Rather, it should provide a checklist for both Council and a landowner.</p> <p>Consistency with the Strategy and the Regional Plan will always be the overriding factors.</p>

5 Second Exhibition of Draft Strategy

5.1 Revision following Public Exhibition

As noted above, one of the outcomes of the first exhibition of the Strategy was a significant re-working of the document to address the key issues raised. The scale of changes led to a decision to re-exhibit the Strategy to provide transparency.

Following consideration of a report on the revised Strategy, Council on 15th October 2019, resolved to re-exhibit the document and invite submissions from interested persons. The exhibition period was between 18 October and 18 December 2019. Drop-in sessions were hosted by GMC as follows:

- » **Marulan** – 2pm – 6pm, 19th November, 2019 at the Marulan Community Hall, 70 George Street, Marulan
- » **Goulburn** – 2pm – 6pm 25th November, 2019, Council Chambers, 184 Bourke Street, Goulburn

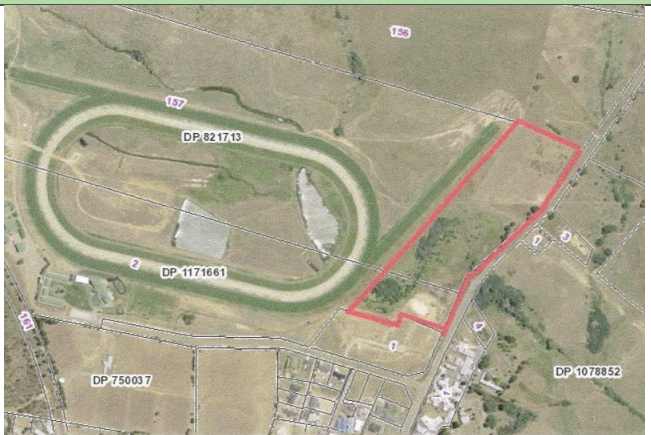
During the Public Exhibition period 28 submissions were received; 4 from Agencies, and 24 from members of the public. These submissions are summarised in Table 5 and Table 6 below. Many of the submissions follow on from submissions made earlier in the consultation process, including the exhibition of the earlier Draft Strategy. A number of new public submissions relate to issues and opportunities raised in the revised Draft Strategy.

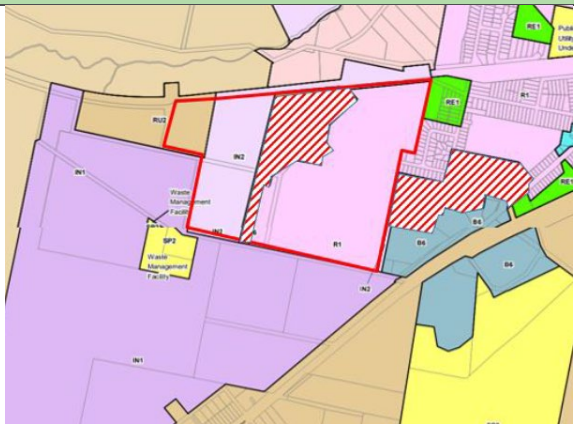
5.2 Summary of Public Submissions

Numbers start with a 2 to indicate the second exhibition of the Draft Strategy.

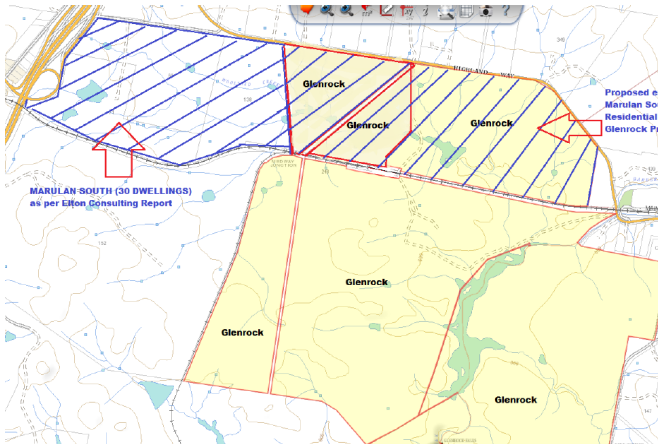
Table 5 Overview of Public submissions during Second Exhibition

No.	Submitter/Precinct	Issues Raised
2.1	Laterals Planning Goulburn and District Race Club 12 December 2019 Precinct 6 Middle Arm East No submissions made in the first DUFHS exhibition on this matter.	Seeks to have a section of the Goulburn and District Race Club site, 204 Taralga Rd, Goulburn (Lot 1 DP 12155740) included within the Strategy as an area suitable for rezoning from RE2 Private Recreation to R5 Large Lot Residential. Also seeks the inclusion of a portion of land affected to be included in Schedule 1 of the LEP to allow animal boarding and training establishments.

No.	Submitter/Precinct	Issues Raised
		 <p>The proposal has potential to allow for approximately 15 residential lots ranging from 2000 -3000m² in area.</p> <p>A number of studies were undertaken in support of the submission. Preliminary consultation has also been undertaken between the Race Club and APA in relation to the Gas Pipeline. APA made a number of suggestions to the proponent which are consistent with APA's advice to Council in relation to identifying and protecting the easement, measurement lengths for sensitive uses etc.</p> <p>The submission states that connection to town water/sewer services is possible and proposed.</p> <p>The submission assesses the suitability of the site against the criteria in the Strategy for consistency, and against the objectives of the R5 zone.</p> <p>Response/Comment: The site was not identified as an opportunity site, however, is located opposite the opportunity site for Precinct 7 – Kenmore, across Taralga Road. The submission is consistent with the Strategy in that essentially this would be an infill development of a site that can be serviced. However, the submission is seeking large lots on land that could potentially be serviced which is contrary to Section 1.6 of the Strategy.</p> <p>Larger lots would need to be justified either on the basis that the site constraints would limit smaller lots or that this is essentially facilitating a mixed land use within this area (i.e. a special precinct around the racecourse) being animal boarding and training establishment with residential component.</p> <p>A note has been added to the Precinct 6 overview that this may be an opportunity site and may include animal boarding and training establishments, with a subsequent Planning Proposal being the appropriate mechanism to determine the specifics for this site.</p>
2.2	Willow Tree Planning on behalf of Darraby Pty Ltd and Marulan Estates Pty Ltd 18 December 2019	Supports the principles and directions of the Draft Strategy and seeks to have additional land considered for residential development in Marulan as identified in the plan below in red and white hatching.

No.	Submitter/Precinct	Issues Raised
	<p>Precincts Marulan Town Centre and Marulan West</p> <p>Partly refers to former Site 15 (for comments on Portland Ave etc) as identified in the first exhibition of the DUFH.</p>	 <p>Specifically land zoned RU6 within the Marulan Estate area and land zoned IN1 and IN2 located within Portland Avenue and Wilson Drive.</p> <p>That a priority should be made of using the RU6 land within Marulan Estate which is closer to the centre of town in preference to the land identified to the East of the Hume Highway.</p> <p>Land currently zoned IN1/IN2 in Portland Avenue and Wilson Drive should be considered for residential as it would be more consistent with the land uses closer to the town centre and reduce the impact on residents and local roads in relation to industrial traffic.</p> <p>The RU6 area within Marulan Estate has not been considered a housing opportunity in the Strategy due to perceived constraints.</p> <p>The RU6 zone was previously identified to address stormwater detention requirements associated with the development of the residentially zoned portion of the site which is no longer required by Council. It does not serve the purpose identified in the zone objective to provide a transition to rural land as it is located between industrial and residential.</p> <p>Further to the above, as a secondary objective to this submission, the draft UFHS should consider the existing IN1 and IN2 industrial zoned land immediately to the east (along Wilson Drive and Portland Avenue) of the Site for potential rezoning for residential purposes. Such an outcome may provide opportunities to:</p> <ul style="list-style-type: none"> » Improve access and amenity through residential and commercial areas. » Redirect haulage routes and heavy traffic from this area providing an opportunity to improve the quality of local roads. This is in response to one of the constraints identified for the precinct within the draft UFHS. » Improve the land use interface with the Town Centre and its surrounds. » Provide further housing opportunities in an appropriate location in response to the targets of the draft UFHS.

No.	Submitter/Precinct	Issues Raised
		<p>The submission acknowledges that the site constraints identified within the draft UFHS must be overcome. The Site and its immediate surrounds are currently restricted by access, bushfire, haulage routes, and the mineral resources buffer which may impact any increase in density via subdivision.</p> <p>Response/Comment</p> <p>With regard to the land identified around Portland Avenue for rezoning to residential this is generally supported but would potentially trigger a review of the current <i>Employment Lands Strategy</i>. The DUFHS is not the appropriate strategy for considering review of industrial/commercial land supply.</p> <p>With regard to the RU6 zoned area, it is not identified as a housing opportunity in the Strategy due to existing constraints.</p>
2.3	<p>Urbanism on behalf of Ganter Constructions</p> <p>15 December 2019</p> <p>Precinct 15 - Marys Mount</p> <p>Refer previous Submission 4 - "Site 26" First Draft UFHS exhibition.</p>	<p>Raises concerns with the rapid visualisation approach for identifying HEV lands (vegetation) when applied to the Mistful Park site.</p> <p>A Flora and Fauna Report was submitted for the site with the lodgement of the Planning Proposal for this site (prior to its inclusion with the Housing Strategy). This report was far more detailed and prepared in consultation with Council.</p> <p>The rapid visual assessment has resulted in a greater area being represented as potential HEV than that previously identified in the more detailed study.</p> <p>a) The draft Strategy acknowledges Council's Resolution of 6 March 2018 in relation to the Mistful Park Urban Expansion Lands Planning Proposal (Precinct 26 formerly and now Precinct 5) which states:</p> <p><i>2. The Planning Proposal to rezone the 'Mistful Park' property is supported in principle but deferred at this time pending the outcome of the Urban & Fringe Housing Strategy.</i></p> <p><i>3. The Planning Proposal to rezone the 'Mistful Park' property be included on a list of properties to be considered in the Urban & Fringe Housing Strategy and the applicant be encourage to investigate the concerns raised by the State Government Departments.</i></p> <p>b) The draft Strategy is corrected to acknowledge the more rigorous environmental field work that has already been undertaken by Woodlands Environmental Management in direct consultation with Council's Environmental and Strategic Planning staff in 2017. Further, that environmental overlays contained in the draft Strategy are corrected to identify the site as being subject to detailed site surveys already undertaken by the landowner in consultation with Council staff.</p> <p>c) That the Draft Strategy specifically identifies Mistful Park Urban Expansion Lands Planning Proposal as substantially</p>

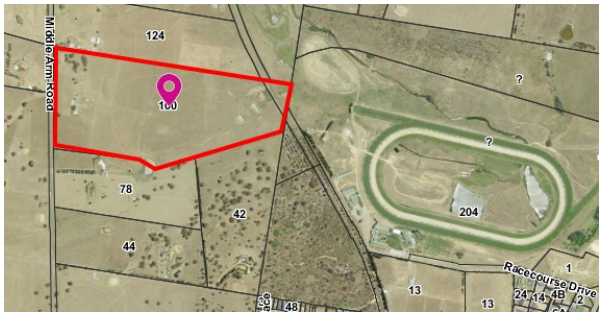
No.	Submitter/Precinct	Issues Raised
		<p>progressed and proponent-led and that a report recommending its progression to the NSW Department of Planning Industry and Environment LEP Gateway be received for Council's consideration along with the draft Strategy so that the detailed environmental assessments and pathways can be progressed with OEH.</p> <p>Response/Comment:</p> <p>Noted. There is an opportunity for proponent-led planning proposals and this has been acknowledged in the revised Draft Strategy.</p> <p>This site will require a BDAR as part of that process to verify at a site level the biodiversity impact of development. Site-specific recommendations and history have not been included in the Strategy as this level of detail is not considered to be appropriate for this document.</p>
2.4	<p>Tomasy Planning</p> <p>On behalf of Gormen Pty Ltd</p> <p>7 December 2019</p> <p>Refer also Submission 29 – DUFHS – First Exhibition.</p>	<p>Seeks to include a portion of "Glenrock" (248 Highland Way, Marulan) as potential rural residential development within the Draft Strategy as per below.</p> <p>The submission suggests that if the inclusion of the land identified in Highland Way for rural residential is essential then the inclusion of this segment is essential as well as it has the same constraints and topographical features.</p>  <p>This is supported by justification in relation to location and site suitability (refer submission for details). The submission notes that inclusion of this property within the Strategy is:</p> <ul style="list-style-type: none"> » Consistent with the Strategy » Does not undermine future residential land opportunities » There is an absence of land use conflict » Not flood affected. Connects to existing road network » Provides a meaningful number of lots » Practical utility: cost and efficiency » Community benefit must be placed over developer opportunism. » Exclusion from Strategy will adversely impact Glenrock

No.	Submitter/Precinct	Issues Raised
		<i>Response/Comment:</i>
		The “Glenrock” site is outside the Marulan Fringe Study Area. Development of this precinct has been questioned by Water NSW, DPIE (Geoscience) and Boral due to water quality constraints and to potential residential/quarrying interface constraints. As a result, no further development is recommended under the Draft Strategy.
2.5	<p>Tod Anderson on behalf of T & T Equity Pty Ltd</p> <p>5 December 2019</p> <p>Refer Submission 7 – DUFHS – First Exhibition</p>	<p>Submission in relation to 152 – 194 Brayton Road, Marulan.</p> <p>Supports the inclusion of this property as a development opportunity site in the context of a possible future residential zoning. Submission indicates willingness to participate in or independently initiate a planning proposal for this site.</p> <p>Seeks to clarify the language used in the call-out to the Precinct Map and relationship between flood constraints and lot size.</p> <p>Comment/Response:</p> <p>The areas indicated in the Strategy are indicative only, with more detailed zone boundaries to be determined at the Planning Proposal stage.</p> <p>To clarify, the precinct map has been amended to designate it for urban residential.</p>
2.6	<p>Suresh Guduguntla on behalf of Kentgrove South Property Pty Ltd</p> <p>17 December 2019</p> <p>This is outside the investigation area and was identified as Site 38 in the original DUFHS exhibition.</p>	<p>Seeks to have land known as 17699 Hume Highway, Towrang identified as a future land release opportunity site in the Strategy for rural residential lots with minimum lot size of 5Ha around Riparian Corridors and 2Ha in other areas.</p> <p>Justification includes, but is not limited to, the following.</p> <ul style="list-style-type: none"> » The subject site is well located - it has access from both the Hume Highway (1.3km frontage) and Boxers Creek Road (1.5km frontage) and is in close proximity to the northern entry to/exit from Goulburn. » The subject site is right across the road from 420 Acres of Industrial zoned land which will eventually be developed into an Industrial hub/park. » Electricity and telecommunication connections are readily available for extension into the subject site. An electricity easement traverses the subject site. » The subject site is large enough to accommodate the environmental issues e.g. riparian corridors, biodiversity etc. There is no flood affectation outside riparian corridors on the subject site. <p>This submission suggests that the reasons previously used to exclude this property from the Strategy are not substantiated as follows:</p> <p>Not Contiguous to Goulburn urban area:</p> <p>Even though the subject site is not contiguous to Goulburn town, it is right across the road from 420 Acres of industrial zoned land which will be developed into an industrial</p>

No.	Submitter/Precinct	Issues Raised
		<p>hub/park and the subject site would be ideal for people to live and work across the road. Also, any infrastructure investment to develop the industrial zoned land would be more cost effective to have development on either side of highway rather than just on one side.</p> <p>Economic indicators suggest that there will be growing demand for affordable rural residential lots from people living in Sydney who are considering a tree change to the Goulburn region, as Goulburn is only 90mins away from Campbelltown/Camden areas and the lot sizes are getting smaller and more expensive in Sydney and its fringes. Also, having a mix of rural residential lots around the fringes of Goulburn along the Hume Highway corridor with direct access to the Highway will cut down 10 to 15min travel time.</p> <p>One of the key strategies of the Goulburn Mulwaree Community Strategic Plan 2030 is “to provide opportunity for residential and rural residential development and encourage affordable housing”.</p> <p>The subject site is within a 3km radius of the Precinct G-10 Mountain Ash identified for growth area in Urban and Fringe Housing Strategy for 164 large lot dwellings.</p> <p>Biodiversity:</p> <p>The site is identified as “Biodiversity” on the Terrestrial Biodiversity Map Goulburn Mulwaree LEP 2009. It is understood that the Office of Environment and Heritage and Council are revising the map.</p> <p>The “Biodiversity” identification potentially reflects the presence of some remnant vegetation on parts of the site.</p> <p>We understand from the local EcoLogical consultant that in the Goulburn Mulwaree LGA, particularly in the periphery of Goulburn, the Terrestrial Biodiversity Map only broadly reflects the actual biodiversity values at any particular location in the LGA. Indeed, the Terrestrial Biodiversity Map is often inaccurate when considered at the site scale and therefore it should be revised following field-surveys to appropriately ground-truth and map the biodiversity values of the subject land.</p> <p>We have been advised by the Local Land Services back in August 2018 that, "there is no sensitive land on this property - only vulnerable is the riparian protected area - see Map 2. The land is a very cleared landscape and would be close to <10% vegetation cover - which would restrict most clearing activities besides the allowable activities".</p> <p>The subject site has very little conservation value given that it is highly modified grassy woodland and its prolonged grazing history.</p> <p>Flooding</p> <p>There is no flood affectation outside riparian corridors on the subject site.</p> <p>Comment\Response:</p>

No.	Submitter/Precinct	Issues Raised
		<p>The inclusion of this site as a rural residential opportunity area is consistent with the Strategy only in so far that connection to water/sewer is unlikely.</p> <p>Significant upgrades to Hume Highway access would be required.</p> <p>Suitable supply for rural residential is already identified in the Strategy primarily in the Mt Gray East, Mountain Ash and Brisbane Grove precincts. These precincts are closer to the Goulburn centre and have better road access (i.e. do not require Hume Highway access upgrades).</p> <p>The flood mapping for Goulburn does not extend to this area, therefore, flooding would need to be further assessed. The biodiversity value of the site is also not assessed in detail, however this is not a primary factor for excluding this site from the Strategy.</p>
2.7	<p>JH & EM Hoskins</p> <p>18 December 2019</p> <p>Gorman Rd Precinct</p> <p>Refer also previous Submission 2 – DUFHS First Exhibition.</p>	<p>Supports the consideration of land in the Gorman Rd precinct for lot sizes of 2Ha minimum.</p> <p>Seeks that Council rezone the sewer irrigation area land to a compatible land use as the use of this area will affect future residential land use of other properties on Gorman Road.</p> <p>Suggests that Council expand the Gorman Road Cemetery to include all or part of:</p> <p>Lot 491 DP669162</p> <p>Lot 1 DP 111406</p> <p>Lot 50 DP 750050.</p> <p>Comment/Response:</p> <p>The future of the sewer irrigation area once identified as surplus to Council's requirements is a separate matter for assessment.</p> <p>The expansion of the Gorman Road Cemetery is a separate matter for Council to investigate, outside of this Strategy which is focused on housing.</p>
2.8	<p>Stewart Thompson</p> <p>16 December 2019</p> <p>Precinct 2 Run 'O' Waters Rural North</p> <p>Refer previous Submission 23 – Site 4 – First DUFHS exhibition.</p>	<p>The submission relates to the proposal to rezone land to a 700m² minimum allotment size.</p> <p>A number of precinct-specific observations are made in support of the identification of the future residential area given the ability to provide:</p> <ul style="list-style-type: none"> » Water/sewer service provision. » Telephone and internet service provision » Electricity provision <p>The submission observes that the release of this area will provide an opportunity for better road connection with Goulburn (connectivity with existing Run-O-Waters and capacity for a further emergency egress from this locality).</p> <p>Water quality requirements can be met with a future residential development.</p> <p>The precinct does have some environmental constraints with areas containing the Tableland Grassy Box-Gum</p>

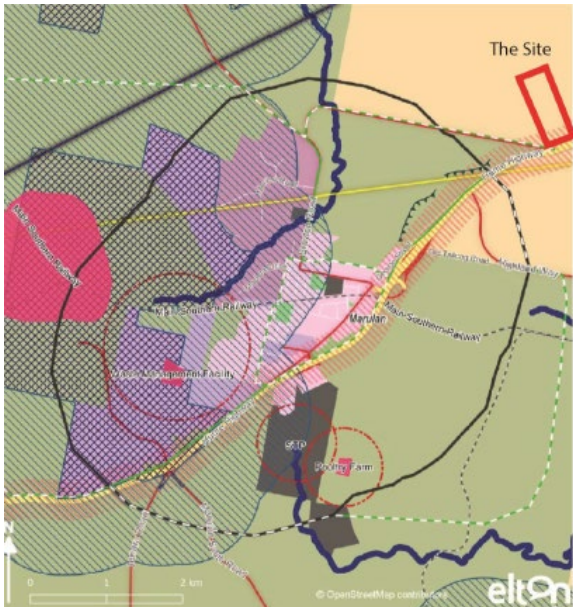
No.	Submitter/Precinct	Issues Raised
		<p>Woodland endangered ecological community and riparian corridors. These areas provide opportunities as green/habitat corridors. Biodiversity stewardship should be considered with future development to protect and maintain these areas.</p> <p>Development along the northern section of Run'O'Waters should be limited to provide a buffer and wildlife corridor. Some owners in this section have expressed a desire to maintain a rural outlook.</p> <p>Comment/response:</p> <p>This submission is generally supporting the inclusion of this site as an opportunity area in Precinct 2 – Run'O'Waters (north).</p> <p>Further biodiversity investigation will need to be undertaken for the north/south corridor between Bonnett Drive through to Addison Street/Gurrundah Road to enable a more specific approach to the consideration of this area's redevelopment. This is likely to occur as a part of a Planning Proposal process.</p>
2.9	<p>Southern Cross Consulting Surveyors On behalf of the Parlett and Murray Families</p> <p>15 January 2020</p> <p>407 and 457 Crookwell Road, Goulburn (Lots 70 and 73 DP 1006688).</p> <p>Precinct 4 Sooley</p> <p>Refer also previous Submission 30 – First Exhibition of DUFHS "Site 6".</p>	<p>The submission notes that the Urban and Fringe Housing Strategy - Post Exhibition Review prepared by Elton Consulting and dated 2 October 2019 response to the previous submission dated 21 February 2019 was supportive of part 407 Crookwell Road being suitable for future urban expansion for 'short to medium term release' but for mapping which identified that the site as being mapped as biophysically strategic agricultural land (BSAL). Subsequent investigations and inquiry indicate however that the application of BSAL mapping is relevant only to the gateway process for mining and petroleum development under <i>SEPP (Mining, Petroleum and Extractive Industries) 2007</i>. In this respect, the application of BSAL mapping relating to a proposed change in zoning from rural to urban is not appropriate.</p> <p>The subject site is not isolated and adjoins land on the eastern side of Crookwell Road which has been identified for short term urban release. It is anticipated that the site is capable of a lot yield in excess of 200 lots containing areas of not less than 700m². In area, the development site mirrors recent subdivision precincts in Goulburn, known locally as Mistful Park, Teneriffe, Belmore Estate, Monastery Gardens, The Tillage and Joseph's Gate. These developments have been highly successful and have met local market demands.</p> <p>Comment/response:</p> <p>Part of 407 has been identified as an opportunity area. Council during the exhibition of the Strategy contacted NSW DPIE to gain clarification as to the nature of the impact/constraint that the BSAL classification poses in relation to the Strategy. As stated in the submission, DPIE confirmed that BSAL is a tool used in the SEPP - mining, petroleum and extractive industries.</p>


No.	Submitter/Precinct	Issues Raised
		<p>However, the BSAL constraint aligns with Class 3 land and soil capability being land capable of a wide variety of land uses. It remains a valid constraint to development particularly in the short term and in circumstances where sufficient land has been identified that does not share this constraint. The adjoining opportunity area in the Middle Arm West precinct is identified for short/medium term development guided by a Structure Plan/DCP to ensure adequate open space/green infrastructure, and social infrastructure, and assist in calculating water and sewerage servicing requirements.</p> <p>It is, however, recommended that the priority status of “low” be removed to facilitate a proponent-led planning proposal.</p> <p>The submission includes 457 which was not identified as an opportunity area at this stage. Again, this site is almost completely within the class 3 agricultural land area. It is not intended to include this site given the area of land identified elsewhere.</p> <p>At this stage, the Strategy has identified sufficient land to satisfy residential demand and it is recommended that this site remain rural.</p>
2.10	<p>Garrie Roberts</p> <p>14 November 2019</p> <p>North of Goulburn fringe study area.</p> <p>No previous submission to DUFHS on this matter.</p>	<p>Requests that the land previously proposed under Amendment 6 including 130 Marble Hill Road, Kingsdale to be considered under the Strategy.</p> <p>Requests investigation of Council’s Heritage Map which includes 130 Marble Hill Road.</p> <p>Comment\Response:</p> <p>130 Marble Hill Road, Kingsdale is located well outside of the fringe investigation area for the Strategy. Heritage Map revisions are outside the scope of the Strategy which is focused on housing.</p>
2.11	<p>Bernadette & Hugh Moran</p> <p>26 November 2019</p> <p>100 Middle Arm Rd, Goulburn (Lot A Plan 357487)</p> <p>Precinct 6 Middle Arm East</p> <p>Site sits immediately above previous “Site 1” in original DUFHS.</p> <p>No previous submission to DUFHS on this matter.</p>	<p>This submission seeks inclusion of 100 Middle Arm Road in the potential Residential zones. More correctly, it appears only the South-Eastern corner of our property is included in the proposed Residential zones, causing our property to have dual zoning.</p>  <p>We would submit that the entire 28.33 Hectares should be zoned Residential, for serviced low density Housing.</p> <p>The reasons for this include:</p>

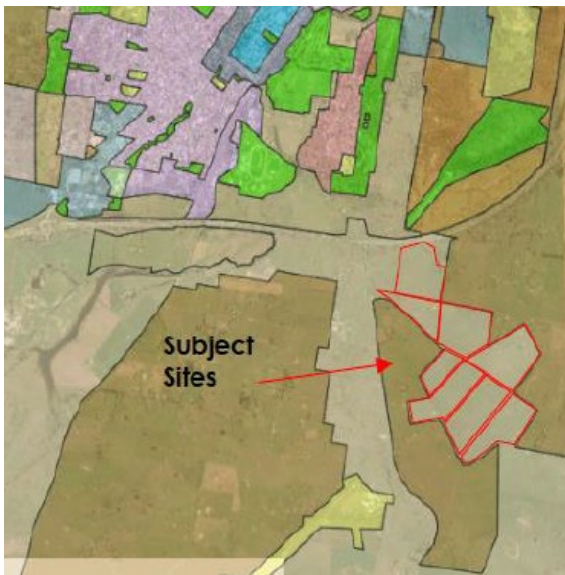
No.	Submitter/Precinct	Issues Raised
		<ul style="list-style-type: none"> » the property is contiguous with urban areas, with close proximity to town » part of our property is already in the land bank designated as Serviced Residential » because of its location there is viable serviceability of water and sewer » the size of the property (28.33 Ha / approx.. 70 acres) provides the ability to stage development, particularly if the owners of adjacent smaller properties remain on their holdings long term as lifestyle properties. » the property is a flat, treeless plain, which will require minimal clearing of vegetation. » the property has road frontage to Middle Arm Road. <p>Comment/response</p> <p>100 Middle Arm Road is located north of the APA gas pipeline which closely follows the southern boundary and crosses the south-east corner of the property.</p> <p>100 Middle Arm Road is within the identified 'future residential urban release area'. This development opportunity area is proposed for serviced residential (700sqm MLS) post 2036 or once land south of the gas pipeline has been developed/residential supply in identified precincts is exhausted.</p>
2.12	<p>George Gildea</p> <p>29 November 2019</p> <p>18 December 2019</p> <p>8 January 2020</p> <p>Previous submission in relation to APA Gas pipeline management made to Council and reported on with the previous post exhibition report on the DUFHS</p>	<p>This submission relates specifically to the presence and management of the high pressure gas pipelines owned and managed by APA and APA's representations to Council on this matter in relation to the Strategy and potential development of identified opportunity areas to the north of Goulburn.</p> <p>The submission does not accept the proposition by APA that there is any responsibility upon Council as a planning authority in relation to assessing and planning around risks associated with the high pressure gas pipeline.</p> <p>The submission reiterates that the gas pipeline is the sole responsibility of APA. Furthermore, that nobody outside the pipeline operator is required to protect the assets of the pipeline operator. Furthermore, there is nothing contained within SEPP (Infrastructure) nor within the Australian Standard requiring Council to undertake upon itself any responsibilities associated with pipeline safety.</p> <p>The submission states that the pipeline easement restriction only apply to the land below the surface and not to surface land use.</p> <p>Comment/response:</p> <p>DPIE also made a submission relating to the gas pipeline. Please refer to 1.9 Key Issues further on in this report.</p>
2.13	<p>Precise Planning on behalf of the owner of 515 Crookwell Road, Kingsdale</p>	<p>As per a previous submission to the earlier Strategy, this site is sought to be included as an area which is appropriate</p>

No.	Submitter/Precinct	Issues Raised
	<p>3 Dec 2019</p> <p>Sooley Precinct</p> <p>Refer Submission 28 (DUFHS first round exhibition and "Site 12).</p>	<p>for rural residential development. With lots ranging in size from 4,000m² – 2Ha.</p> <p>The reasons given in support of rural residential development include:</p> <ul style="list-style-type: none"> » The site is only moderately constrained in relation to other more highly constrained sites. » The site has no productive use and will be sterilised if left out of the Strategy. » Water quality issues and proximity to Sooley Dam can be addressed. » Council has not undertaken any feasibility analysis on which to base decisions on likelihood of extension of water and sewer services to this site which disadvantages the land owner. » Holistic on-site effluent management solutions should be addressed now rather than left until later. » Intensive Plant agriculture is a permissible use and would have a similar impact in terms of water quality. » Council should consider this matter in context with other sites and against the orderly and economic objectives of the NSW Environmental Planning and Assessment Act. <p>Comment/response</p> <p>This submission is not supported. Reasons for exclusion include:</p> <ul style="list-style-type: none"> » The demand for urban residential and rural residential land in Goulburn has been met as identified within the Strategy. » The sites chosen for urban development are more contiguous with existing residential than this site. » For rural/large lot residential (where no town water/sewer connection is proposed), the development opportunity areas identified are not within an immediate catchment for Sooley Dam -Goulburn's water supply.
2.14	<p>Kingsdale Consulting for 16 Nicole Place</p> <p>12 December 2019</p> <p>Garfield Precinct</p> <p>Refer also previous Submission 39 – First exhibition of DUFHS</p>	<p>This submission is in relation to a request to reduce the minimum allotment size of the E4 Rural Living Zone on the eastern side of Carr Street from 8,000m² to 4,000m².</p> <p>The description of the Garfield Precinct in the Draft Strategy does not really fit with the Cathcart Street locality.</p> <p>A previous submission to this Strategy included an assessment of biodiversity for this area which found the remnant native flora is limited with many established gardens with exotic species. Therefore, a reduction of the minimum allotment size on the eastern side of Carr Street will not have a significant impact on biodiversity.</p> <p>Comment/response:</p>

No.	Submitter/Precinct	Issues Raised
		<p>The precinct character description has been updated to include the transitional large lot residential area on the western fringe.</p> <p>Council could consider a reduction of minimum lot sizes within the zone where supported by an assessment of biodiversity value.</p>
2.15	<p>Goulburn Heritage Group</p> <p>14 December 2019</p> <p>Precinct 18 – Heritage Conservation Area/CBD</p> <p>Refer also previous Submission 10 – First exhibition DUFHS.</p>	<p>Generally supports the revised Strategy and offers specific comments on Precinct 18 – Heritage Conservation Area, where medium density residential expansion needs to be encouraged.</p> <p>Comments/response:</p> <p>Council's developer contributions plans will require updating as a part of the planning associated with substantial zoning change.</p> <p>Design guide details are more appropriately included in a development control plan (DCP). Council is in the process of reviewing its DCP. Desirable streetscapes and design standards can be incorporated into the DCP, however, Council is not resourced to provide individual site controls for every site.</p> <p>For the purposes of the Strategy it is relevant to consider Heritage as a constraint when identifying areas suitable to be rezoned to R3 – Medium Density. It is agreed that heritage can be an opportunity for urban design purposes.</p> <p>A greater number of units in the CBD is consistent with the need identified in the Strategy to increase housing choice in serviced areas and housing to suit an ageing population.</p> <p>An action to review planning provisions in the LEP/DCP in the CBD to allow more housing has been added and Precinct 18 has been updated to include CBD opportunities for housing.</p>
2.16	<p>John Craig & Jeanette Shuttle</p> <p>16 December 2019</p> <p>Lots 11 and 12 DP 1156095 (Middle Arm Road and Progress Street)</p> <p>Bradfordville Precinct</p> <p>No previous submission to DUFHS – however had sent letter to Council seeking a PP in relation to Point 1.</p>	<p>This submission relates to two matters:</p> <ol style="list-style-type: none"> 1. Request to rezone the portions of the identified lots currently zoned E3 Environmental Management to R2 Low Density Residential. A plan submitted which (was originally supported by a detailed slope stability investigation) indicates extent of slope affectation. E3 Areas where slope affectation remain problematic should have the minimum lot sized reduced to 4Ha on the presumption a lot this size could have a suitably located dwelling site in relation to the slope. 2. Notes that Lot 8 DP 258489 Progress Street (former Site 14) has an approved subdivision on it which should be acknowledged by the Strategy. <p>Comment/response:</p> <p>1. The boundaries of identified development opportunity areas are indicative only. Lots 11 and 12 are within an area generally identified for urban development and would have a relatively minor impact on the overall supply of housing. If the constraints are addressed, and the land can be serviced,</p>

No.	Submitter/Precinct	Issues Raised
		<p>Council could consider a PP, <i>however</i>, noting that DPIE (Environment)'s submission to the Strategy states 'any split zones should be rezoned in favour of Environmental zones'.</p> <p>2. Lot 8 is already zoned R2 with an expectation of residential development and therefore requires no further consideration by the Strategy.</p>
2.17	<p>Little Develop Co. on behalf of Mr and Mrs Kelly</p> <p>17 December 2019</p> <p>15108 Hume Highway, Marulan Lot 12 DP 700290</p> <p>Just north of Marulan North precinct.</p> <p>No previous submission has been made in relation to this site.</p>	<p>This submission seeks the inclusion of 15108 Hume Highway, Marulan Lot 12 DP 700290 as outlined in red (below) when overlaid on the Constraints Map for Marulan.</p> <p>Seeks an LEP amendment to reduce the minimum allotment size from 40Ha to 10Ha and suggests that this can add to housing supply. The amendment would facilitate a 4 lot subdivision.</p>  <p>Suggests there is strong strategic merit in this as there are minimal to no physical constraints:</p> <ul style="list-style-type: none"> » The site is in a single ownership and has connection to electricity. » The site is bushfire prone (which can be managed). » The site is not flood prone. » The site has two access points. » New dwellings could be sited outside of 250m from the Hume Highway. » The site is within 3km of the Marulan town centre. <p>Comment/response:</p> <p>This submission is not supported, as this site is located outside the investigation area and does not offer a substantial contribution to rural residential supply.</p>
2.18	<p>Jessica Renshall on behalf of the owners of 1 Bishopthorpe Lane, Baw Baw</p>	<p>The sites are within the RU6 Transition Zone and identified in the Baw Baw Precinct of the Strategy. This area is</p>

No.	Submitter/Precinct	Issues Raised
	<p>17 December 2019</p> <p>Baw Baw Precinct</p> <p>68 Range Road and 1 Bishopthorpe Lane, Baw Baw.</p> <p>No previous submission made to DUFHS.</p>	<p>intended to be held in reserve for urban residential (for development post 2036).</p> <p>A portion of this area was a non-putrescible land fill site for building waste. The filling process has ceased, and the capping process is underway. The site has been tested for gas leakage and has shown zero emission. Tested on June 2019 by Consulting Earth Scientists.</p> <p>The site currently abuts a rural residential zone, therefore requests that the zone be extended to include these properties.</p> <p>If not rezoned the land will sit unused and create a less than desirable landscape as the site has little to no agricultural value for land use.</p> <p>Proposes a subdivision into 14 Large Lot Residential sites at 4,000sqm each, with semi-private open space in the middle. Any residential buildings will not sit on the areas where filling has taken place.</p> <p>The site is accessed by two roads, Range Road and Bishopthorpe Lane and is already connected to water, electricity and sewage.</p> <p>Seeking development in keeping with the local trend and will service the future of the area by providing further housing with the added benefit of semi-private open space in the middle. An equestrian arena has been mentioned as a possibility and such a use is permissible on the site of the former landfill.</p> <p>Comment/response:</p> <p>The DUFHS identifies this area as having potential for future urban serviced lots as it is considered more constrained by slope than other opportunity precincts identified. It should be protected from fragmentation by large lot residential development in the meantime (until 2036 or such a time that housing supply identified in the Strategy is exhausted).</p> <p>Note: This site includes a licenced fill site on 68 Range Rd (as described above) and a rural residential property on approximately 10 ha. The site also borders historic site 'Bishopthorpe'.</p> 

No.	Submitter/Precinct	Issues Raised
2.19	<p>John Taylor</p> <p>18 December 2019</p> <p>Refer previous submission 14 – First exhibition of DUFHS – vicinity of “Site 25”.</p>	<p>Congratulates Council on the revised Strategy and appreciates the consideration of the community input from the previous exhibition.</p> <p>Refers to Site 25 (reference to original Draft Strategy) in the Mountain Ash Precinct 10, and notes the update to the biodiversity comments which now reflect lesser constraints for this issue and supports this.</p> <p>States that there is no impact in this area from noise associated with motor racing.</p> <p>Questions the Precinct 10/11 Constraints and Opportunities Map regarding the boundary of the area noted as 140.6 Ha, but notes that this may only be indicative.</p> <p>Notes an error in Precinct 19 Ifield – a potential infill area is vacant blocks behind Goodstart Early Learning, access via Erith St. This area is actually in Precinct 18 Central Goulburn.</p> <p>Remains unclear about how demand is established.</p> <p>Comment/response</p> <p>Boundaries of opportunity areas within the Strategy are only indicative. Further detailed assessment of a number of constraints will be required to determine extents of areas available which are suitable for large lot residential development.</p> <p>Ifield precinct map has been revised to generally encourage infill rather than identifying specific sites.</p> <p>Refer to ‘Large lot residential demand and supply’ in section 5.4 Clarification of this report.</p>
2.20	<p>Mecone on behalf of Windellama Road Pty Ltd</p> <p>18 December 2019</p> <p>Refer previous Submission No 27 for “Site 25”</p>	<p>Submission on behalf of owners at Mountain Ash Road, Brisbane Grove as indicated in red below.</p>  <p>Submission suggests that demand may be greater for rural residential lots than that specified in the Strategy.</p>

No.	Submitter/Precinct	Issues Raised
		<p>The submission is concerned that the Strategy is ambiguous in terms of whether a Council-led Planning Proposal will be prepared for large lot/rural residential investigation areas.</p> <p>Requests that Council does undertake a Council-led PP and that this be clarified.</p> <p>The submission included a concept subdivision plan and constraints mapping.</p> <p>Comment/response:</p> <p>Next steps have been updated and clarified in the Implementation section of the Draft Strategy.</p> <p>Given the extent of development opportunity areas considered in the precinct approach of the revised Draft Strategy, it is not practical to undertake a single Council-led PP. Council's preference is for individual PPs representing groups of owners within precincts.</p> <p>Site studies and works to complete PPs are to be at the cost of the landowners as:</p> <ul style="list-style-type: none"> » This Strategy will see a huge uplift in value for land identified as development opportunity. » Sites are likely to be sold and developed by others. » Council cannot afford the studies. » Some studies will take longer than others depending on the site. » The willingness/ability of owners to financially contribute will vary. <p>Concept subdivision plans are not considered as a part of this Strategy, as the Strategy is considering broader constraints across all precincts. Details of individual sites and potential subdivision layouts will be considered as a part of further planning proposals, site-specific technical studies, etc.</p>
2.21	<p>APA Group</p> <p>18 December 2019</p> <p>Goulburn Precincts 4 Sooley, 5/6 Middle Arm, 7 Kenmore.</p> <p>4-Marulan West.</p> <p>Previous submission included in State Agency Submissions (following first DUFHS exhibition). Privately owned infrastructure provider.</p>	<p>This submission relates specifically to APA's interest as the owner and manager of the high pressure gas pipelines which pass through the LGA and in particular North Goulburn.</p> <p>Overall, APA is generally supportive of the Strategy. However, it suggests further inclusion of commentary and mapping of APA's existing HPTGPs and easement within the study area, specifically:</p> <p>Figure 1 Urban Expansion Recommendations Goulburn</p> <p>Overlay APA's existing HPTGPs and easement.</p> <p>Figure 2 Urban Expansion Recommendations Marulan</p> <p>Overlay APA's existing HPTGPs and easement.</p> <p>Section 4.8.1 Criteria of identification of greenfield sites</p> <p>APA recommends inclusion of the following statement:</p>

No.	Submitter/Precinct	Issues Raised
		<p><i>Development should minimise conflict and not result in fragmentation of existing high pressure transmission gas pipelines.</i></p> <p>Section 4.9 Constraints and Opportunities Assessment</p> <p>APA recommends inclusion of commentary regarding high pressure transmission gas pipelines within Table 24 – Opportunities and Challenges as follows: (refer to full copy of submission).</p> <p>APA reiterated comments made in the previous submission in relation to:</p> <ul style="list-style-type: none"> » the preferred treatment of its easement as a linear open space reserve and in relation to road crossings over its easement (i.e limited to periodic perpendicular crossings). <p>Safety Management Study (SMS)</p> <p>The development envisaged under the Strategy would change the land use classification around the pipelines and therefore trigger the need for a Safety Management Study (SMS). In essence, the pipeline has been designed for a rural environment where the risk of damage to the pipeline is low and the consequence of a full bore rupture is also relatively low. The proposed change in land use significantly increases the risks. Therefore, these risks must be examined and measures put in place to reduce the risks to acceptable levels.</p> <p>The current stage of planning is an ideal time to complete an SMS. This is because development layouts can be changed and sensitive land uses can be identified.</p> <p>APA prefers that an independent facilitator manage the SMS to avoid a perceived conflict of interest. APA's position is that the cost of the SMS and any necessary risk management measures (e.g. slabbing the pipeline) be the responsibility of the 'agent of change'. Completing an SMS at this stage ensures the SMS addresses the site as a whole and allows costs to be shared between various development proponents.</p> <p>Australian Standards 2885 and the Measurement Length (ML – 675m either side of pipeline) and safety issues including the exclusion of sensitive uses from the ML.</p> <p>In a separate letter to Council dated 18 December, 2019 APA has advised:</p> <ul style="list-style-type: none"> » It is a principle of the SMS that it merely identifies additional controls that may be required. It does not seek to apportion costs associated with such controls. » There are SMSs conducted for a range of purposes including: » Prior to construction to establish the required controls and design parameters » periodic operational review (5 yearly)

No.	Submitter/Precinct	Issues Raised
		<p>» Encroachment SMS for activity within the pipeline corridor/easement</p> <p>Land use change SMS triggered by specific development proposals. In this instance, the SMS required is triggered only by land use change as a result of the Draft Urban and Fringe Housing Strategy, and is focused on examining risks associated with that land use change. It is not triggered by any change in the pipelines or the age of the pipeline.</p> <p>Planning Generally</p> <p>APA also summarised in its letter dated 18 December, 2019 that:</p> <p>The ML is not an area over which APA has any legal control or any form of tenure, nor do we wish to exercise any such rights. The ML is not an area in which development or activity is precluded. The ML does not prevent use for standard agricultural activities. It does not prevent urban or rural residential development occurring. In fact, there are many instances around Australia, including through major metropolitan areas where development, including residential housing, exists up to the edge of the pipeline easement, with no issue to APA or to the surrounding residential development. In addition, the easement itself provides the opportunity for valuable linear open space, which is an asset to the surrounding community.</p> <p>APA does not seek to impose any outcome on Council (or private development) outside of our pipeline easement, but we are obligated to ensure that Council and developers are aware of the pipeline, associated issues, and work to achieve the best outcomes.</p> <p>Comment/response:</p> <p>APA comments on the preferred treatment of pipeline easements as linear reserve noted and included on the relevant constraint's maps. The preferred development areas maps exclude the constraints, therefore, including the pipeline is not considered necessary.</p> <p>See Key Issues Second Exhibition (section 5.5 of this report) as well as submissions from DPIE and George Gildea on this issue.</p>
2.22	<p>Gunlake</p> <p>13 January 2020</p> <p>Refer previous Submission 24 – First Exhibition of DUFHS.</p>	<p>This submission is mainly concerned with:</p> <ol style="list-style-type: none"> 1. The identification of constraints associated with Gunlakes' operation, e.g. the use of the haulage route along Ambrose Road from Brayton Road to Red Hills Road. 2. Residential interface issues associated with the use of this road, number of truck movements, etc. This route was built to partly avoid residential interface issues with the previous haulage route through Marulan. This would be negated by providing more residential access to Ambrose Road. <p>Comment/response:</p> <p>The Marulan North constraints map includes a buffer to the Gunlake haulage route similar to the Hume Highway buffer.</p>

No.	Submitter/Precinct	Issues Raised
		<p>This has been added to the map legend. Precinct overview and development opportunities identified have been updated to stipulate that access will be from the south with limited to no access north to Ambrose Road - Hume Highway so as to not impact on the haulage route.</p> <p>Site-specific DCP provisions when drafted for the North Marulan Precinct can include further detail on limitation of access of residential subdivisions to haulage route. Master planning will be used to identify preferred access options in this precinct.</p>
2.23	<p>Jan & Alex Weir and David Long 13 January 2020 Lot 13/DP573773 and Lot 364/DP750015 Precinct 3 – Baw Baw Refer previous Submission 25 also known as “Site 22” first DUFHS exhibition.</p>	<p>Lot 13/DP573773 and Lot 364/DP750015 to be considered under the Strategy as a site for future (short to medium term ie: 2-5 years) environmentally sustainable ‘Green Certified’, residential development. While it is recognised that proposed allotment sizes would be subject to further land capability and infrastructure capacity analyses, we propose that the minimum lot size for both allotments be amended to 700sqm.</p> <p>Such an amendment is consistent with Council’s previous statements on the best use of the subject land as outlined below and is consistent with the recommended future development of the land and precinct as cited in the revised Urban and Fringe Housing Strategy.</p> <p>Comment/Response</p> <p>Green certified developments are certainly encouraged to proactively adapt to the challenges of a changing climate.</p> <p>It is noted that these lots are located next to the current zone boundary with the R5 zone on Addison Street (and Council water reservoir). The sites are lower than the reservoir and could be connected to town water services. It may be possible to connect in future to town sewer services (with pumping stations required given the topography).</p> <p>Refer to 5.5 Key Issues below - Prioritisation of opportunity areas.</p>
2.24	<p>Boral Land and Property Group 16 December 2019 Boral Concrete 30 Wilson Drive, Marulan Marulan Town Centre Precinct 18 December 2019 Peppertree Quarry Marulan South/East Precinct No previous submissions to DUFHS.</p>	<p>Town Centre: Boral is concerned about the Draft Strategy recommendation to consider rezoning Lots 1 and 2 DP1053945 (‘Truck Stop’) within the M-1 Town Centre Precinct for the following reasons:</p> <ul style="list-style-type: none"> » Incompatible land uses – the Portland Avenue/Wilson Drive Industrial Sub-Precinct is accessed by an approved B-double route which keeps trucks off residential roads. Boral’s concrete batching plant is 248 metres south west of the Truck Stop site. Strategy needs to consider these land-use constraints. » The sub-precinct should stay industrial. It has low vacancy rates (HillPDA, 2016) and is largely occupied by storage sheds and small service industries which provide employment for Marulan residents. » Rezoning was not proposed in the Employment Lands Assessment (2016) and is not justified for the sake of an

No.	Submitter/Precinct	Issues Raised
		<p>oversupply. Housing to meet dwelling targets/demand can be provided in North Marulan and existing zoned land in the Town Centre.</p> <p>Boral requests:</p> <ul style="list-style-type: none"> » the addition of mitigation measures and amendments to the Strategy recommendations. » re-wording three of the Local Housing Strategy Objectives (in Section 4 The Priorities). <p>Marulan South (East): Boral objects to the inclusion of land south of the Hume Highway identified as Precinct 2 Marulan South and the recommendation that the land is suitable for residential rezoning and seeks its removal from the Strategy for the following reasons:</p> <ul style="list-style-type: none"> » Lack of demonstrated demand (oversupply of LLR; no demand in Marulan South and sufficient supply elsewhere in the LGA, speculative rezoning likely to have long term implications for agricultural and resource operations); » The potential interface impacts that would likely arise from the locating of an increased number of dwellings within proximity to extractive industry, mining operations, and associated rail assets; » Lack of site suitability due to inherent constraints and incompatibility of residential development with surrounding and established primary production uses. <p>Boral is concerned that inclusion of land identified as Precinct 2 Marulan South would lead to land use conflict due to its proximity to primary industry, including large scale extractive industry and mining, and that the justification provided within the report is not evidence led.</p> <p>Comment/response:</p> <p>Town Centre: The suggested land use conflict mitigation measures are considered reasonable; however, these are developed through a Planning Proposal process rather than the housing Strategy.</p> <p>A rezoning of the 'Truck Stop' site could be considered in conjunction with the adjacent block (6 Hacking Circuit, Marulan) with a structure plan to enable better development outcomes, including the location/s of residential access and avoiding land use conflict.</p> <p>The suggested re-wording of the Objectives is appreciated and has been adopted with slight modifications. Refer to 'Section 4 The Priorities' of the Strategy document.</p> <p>South Marulan the identified opportunity area was deferred following the second Public Exhibition period due to the risk to water quality and the potential land use conflict with extractive and rural industries. These concerns were expressed in submissions from Boral, Water NSW and DPIE (Geoscience). Refer to Section 5.5 Key Issues: South</p>

No.	Submitter/Precinct	Issues Raised
		<p>Marulan Large Lot Residential and Effluent Management Areas (EMAs) of this report.</p> <p>There is community and political demand for the increased supply of Large Lot Residential housing on both the Goulburn and Marulan fringes, as demonstrated by submissions received during the first Public Exhibition of the Draft Strategy, and the resolution (2020/224) of Council on 16 June 2020 to include two additional Large Lot Residential opportunity areas in the Strategy.</p>

5.3 Summary of Agency Submissions

Additional engagement with Government agencies and infrastructure providers was undertaken during the exhibition of this revised Draft Strategy. Together with public feedback outlined above, Agency feedback has informed these final revisions to the Draft Strategy. Agency submissions are summarised in Table 6 below.

Table 6 Re-exhibition Agency Consultation Summary

Agency	Issues Raised
<p>Department of Planning, Infrastructure and Environment</p> <p>19 December 2019</p>	<p>Considers the revised draft Strategy to be significantly improved and strongly supports the precinct-based approach to new development areas. The provision of a variety of housing types including low and medium density, including infill opportunities, as well as additional large lot residential opportunities is also supported.</p> <p>Comments are minor editing or clarification matters, as noted below.</p> <p>Consistency with South East and Tablelands Regional Plan:</p> <p>A number of the proposed development precincts, e.g. Marulan South, Run-O-Waters (Rural North) appear to contain verified high environmental value (HEV) land. The inclusion of validated HCV land in the estimated dwelling yields may create an unrealistic development expectation. It is suggested that Council consider revising the proposed development footprints to avoid validated HEV land consistent with the stated intent of the draft Strategy and requirement of Directions 14, 15 and 28 of the South East and Tablelands Regional Plan.</p> <p>It's unclear from the Strategy whether HEV data has been validated for all of the proposed development precincts or just for specific properties. Council could consider identifying in the Strategy if additional validation is required for specific precincts to inform the preparation of a planning proposal.</p> <p>Population projections:</p> <p>Updated population projections have recently been released for Goulburn Mulwaree LGA. These are available on the Department's website https://www.planning.nsw.gov.au/projections</p> <p>Council note: The population projections from DPIE recently released focus on the low range projection only. The high range projection whilst in the document only appears in a graph which makes it less prominent. The projections are stated in the document as not having to be applied to Housing Strategies. It is considered that the assessment of population in the DUFHS is relatively conservative and takes into</p>

Agency	Issues Raised
	<p>account a higher growth scenario so as to ensure supply. It also provides a clear blue print for future expansion, which will guide planning proposals and infrastructure planning.</p> <p>Eastern Gas Pipeline:</p> <p>It is suggested that Council refer to the Department's Planning Circular in the Strategy in relation to buffer and other mitigation requirements for development proposals on land adjoining the Gas Pipeline. https://www.planning.nsw.gov.au/-/media/Files/DPE/Circulars/planning-circular-18-010-act-and-regulation-changes-2018-10-26.pdf?la=en</p> <p>Council note: The Planning Circular mainly relates to the Development Application stage. Regardless, it is in the public interest to identify all potential hazardous constraints to development and mitigate them at the strategic stage. The Circular does refer, however, to other documentation for the assessment of hazardous development being:</p> <p><i>"Such development should consider preparing a risk assessment as part of the development application to demonstrate that the development will comply with the risk criteria for land use safety planning published in Hazardous Industry Planning Advisory Paper No. 4 – Risk Criteria for Land Use Safety Planning. It is important to have a comprehensive understanding of the hazards and risks associated with the operation of the pipeline and of the adequacy of safeguards.</i></p> <p><i>In assessing the tolerability of risk from high pressure pipelines, both qualitative and quantitative aspects need to be considered.</i></p> <p><i>Any quantitative (numeric) risk assessment should be consistent with the principles published in Hazardous Industry Planning Advisory Paper No. 6 – Hazard Analysis. The risk assessment is to be performed by a suitably qualified professional. This assessment is the responsibility of the applicant and must be undertaken in consultation with the pipeline operator. The risk assessment should be submitted with the development application."</i></p> <p>Constraints/opportunity mapping:</p> <ul style="list-style-type: none"> » It's unclear what the green squares around the proposed development area on the Marulan South Opportunity Map represent. Suggest these are included in the key to the map. » Arrows linking text boxes with proposed development areas are missing on the Gorman Road, Mt Gray East, Kenmore, Run-O-Waters (Rural North) opportunity maps. <p>Ministerial Directions:</p> <ul style="list-style-type: none"> » Ministerial Direction 2.1 Environment Protection Zones is also relevant to the Strategy because it applies to all environmentally sensitive areas, not just to environmental zones. » Suggest that reference to Direction 5.1 Implementation of Regional Strategies is removed because the Direction was revoked on 17 October 2019. <p>Other:</p> <ul style="list-style-type: none"> » Suggest removing section 1.2.4 "Sydney Canberra Corridor Regional Strategy" because the Regional Strategy is no longer relevant as it has been replaced by the South East and Tablelands Regional Plan.

Agency	Issues Raised
<p>Department of Planning, Infrastructure and Environment (Environment)</p> <p>18 December 2019</p>	<p>Aboriginal Cultural Heritage</p> <p>Supports the approach of early consideration of Aboriginal Cultural heritage (via comprehensive assessments) in consideration of future development areas. The Department provided a separate table with comments on specific precincts in relation to Aboriginal Cultural heritage.</p> <p>Flooding</p> <p>The Department acknowledges that the feedback from the previous submission has been incorporated in the revised Strategy. The Department requests that Council continue to work collaboratively to obtain reliable flood information to inform future planning of the LGA and the plans such as the Strategy.</p> <p>Biodiversity</p> <p>The Department recommends that:</p> <ul style="list-style-type: none"> » There is no large lot residential development planned for areas with validated HEV, keeping in mind that areas of HEV must be validated (by an appropriately qualified professional) before a planning proposal is considered. » Areas that are already zoned environmental should not be rezoned to a different zone which offers less protection. » Any split zones should be rezoned in favour of Environmental zones. <p>Council should consider opportunities under the Biodiversity Conservation Act, 2016 for strategic biodiversity certification of future urban release areas.</p>
<p>Department of Planning, Infrastructure and Environment (Geoscience)</p> <p>9 January 2020</p>	<p>The Division has reviewed the Strategy and provides the following comments in relation to Ministerial Planning Direction 1.3 – Mining, Petroleum Production and Extractive Industries, and the Goulburn Mulwaree Mineral Resource Audit 2015.</p> <p>Goulburn housing precincts:</p> <p>The Strategy identifies the Sooley and Middle Arm West precincts are coincident with the Kingsgate Limestone Potential Resource Area (PRA). While the Division is not aware of current extraction operations or plans for development, residential zoning would prohibit development of limestone resources within that part of the Kingsgate PRA. The Division acknowledges the Strategy has avoided the Kingsgate PRA around the Baw Baw and Run 'O' Waters precincts, and that the majority of the PRA remains zoned for rural land uses and available for potential limestone extraction.</p> <p>The Division has no issues with the Goulburn housing precincts.</p> <p>Marulan housing precincts:</p> <p>The Strategy identifies land around Marulan West as being highly constrained by Lynwood Quarry. The Division supports the recommendation that there is no additional development capacity in West Marulan due to significant constraints including incompatible land uses, and that housing in this precinct would sterilise potential resource areas or quarry expansion.</p> <p>The Division acknowledges the potential for land use separation between the Marulan North URA and the Gunlake Quarry haul route as well as a recommendation to limit residential use.</p>

Agency	Issues Raised
	<p>The Division has no concerns with the Marulan South area (north of the main Southern Railway), however further residential development within area M-2 south of the Main Southern Railway in the vicinity of the Peppertree Quarry private rail line (Consolidated Mining Lease 16) would be of concern to the Division.</p>
<p>Water NSW 18 December 2019</p>	<p>General</p> <p>The overall revised Strategy is more responsive to site constraints than the previous version.</p> <p>Where 2Ha unsewered lots are proposed, Water NSW wants greater consideration of the results of the Strategic Land and Water Capability Assessments (SLWCAs) and the buffer distances required for effluent management areas (EMAs).</p> <p>South Marulan appears to be particularly constrained with much of the area being generally unsuited for unsewered residential development. Further consideration of the SLWCAs and EMA buffer distances may help refine Precinct boundaries, improve lot yield estimations, and reduce water quality risks arising from later new development. It will also help ensure that later development will be able to achieve a neutral or beneficial effect (NorBE) on water quality as required under <i>State Environmental Planning Policy (Sydney Drinking Water Catchment) 2011</i>.</p> <p>Precinct boundaries are not overlain with the constraints analysis, it is difficult to determine how the Strategy responds to the site constraints at this broad scale. To this end, Figures A and B would benefit by overlaying the boundaries of the Precincts to show how their location and shape respond to the constraints identified. The constraints analysis would also benefit by including results of the Strategic Land and Water SLWCAs and, for large lot residential development, buffer distances required for EMAs (see below). Such an approach would help substantiate how the Strategy has responded to site constraints including risks to water quality.</p> <p><i>Comment/Response: Figures A and B detailing Goulburn and Marulan constraints were intended to give a general visual appreciation of the main areas of affectation for each town. Layering all constraints would result in unnecessary complexity and reduce the legibility of maps. Constraints are sufficiently mapped by precinct.</i></p> <p>Effluent Management Areas (EMAs)</p> <p>Within the Sydney Drinking Water Catchment, EMAs are required to be sited 100m from permanent or intermittent watercourses and from the full supply level for all water supply reservoirs. They are also required to be located at least 40m from farm dams and drainage features. The Strategy recognises the 100m buffer requirement noting that it poses a constraint to large lot residential (un-serviced lots) development in some fringe precincts, particularly South Marulan, Brisbane Grove and Mountain Ash (p.64). However, none of the individual Precinct summary maps factor this 100m buffer distance into the constraints analysis and only the Marulan South Precinct summary mentions this 100m EMA buffer requirement.</p> <p>WaterNSW recommends that the Precinct Summaries analysis for the Large Lot Residential Precincts (Gorman Road, Mt Grey East, Run'O'Waters, Brisbane Grove, Mountain Ash and South Marulan) be reviewed to include consideration of the EMA buffer distances in the</p>

Agency	Issues Raised
	<p>respective Precinct constraints analyses as projected lot yields may be over-estimated. Such a review may also help identify which land is heavily constrained by the presence and density of watercourses and drainage features and therefore where unsewered development may be highly constrained. The revised analysis would also help ensure that water quality is protected and that a NorBE can be achieved in future subdivisions arising in these areas.</p> <p>Strategic Land and Water Capability Assessments (SLWCAs)</p> <p>Outputs from the SLWCAs are provided for Residential Sewered land and Unsewered Residential lots 4,000m² to 2Ha for both Goulburn and Marulan (Appendix D). However, these outcomes are not discussed in the body of the Strategy. It is unclear whether and how the SLWCAs have informed the broad site constraints analysis (Figures A and B) or those conducted for individual Precincts (Section 3).</p> <p>The Strategy would benefit by more clearly articulating how it responds to water quality risks as informed by the SLWCA results. To this end, the Strategy should examine the location and boundaries of the Opportunity Precincts (Figures C and D) against the water quality risks as informed by the SLWCA results, and provide some explanatory text. Ideally this would be supported by maps that overlay the Precinct polygons for:</p> <ul style="list-style-type: none"> a) the 'Serviced Urban Residential' and 'Urban Release Area Long Term' for Goulburn (Figure C) and Marulan (Figure D) with the SLWCAs for Residential Sewered land for Goulburn and Marulan (Figures 4 and Figure 5 of Appendix D, respectively), and b) 'Large Lot Residential' areas for Goulburn (Figure C) and Marulan (Figure D) with the SLWCAs for Unsewered lots 4,000m² to 2Ha for Goulburn and Marulan (Figures 6 and 7 of Appendix D, respectively). <p>The Strategy would also benefit by mentioning the results of the SLWCAs in the individual Precinct boundaries, particularly the outcomes of the SLWCA for Unsewered Residential lots 4,000m² to 2Ha in relation to the Precincts identified for Large Lot Residential development.</p> <p><i>Response/Comment:</i></p> <p>» <i>All urban development is to be sewerred so the SLWCAs for unsewered residential lots are not relevant for the urban areas. All rural/large residential lot areas identified in precincts such as Mt Gray East, Mountain Ash, Brisbane Grove and Marulan South were deliberately identified as having lots with a minimum of 2ha. There is no SLWCA detailed for lots over this size as far as Council is aware. The main areas identified in SLWCAS for extreme risk are watercourses. This is reflected in the general requirement for a 100m setback from riparian areas for on-site EMAs.</i></p> <p>Sewer and Related Services</p> <p>All Precinct summaries would benefit by clearly stating whether the opportunity areas are, or proposed to be, connected to services such as sewer and water.</p> <p><i>Response/Comment:</i></p> <p>» <i>All urban residential opportunity areas are proposed to be connected to water/sewer and other services (refer Section 3). Large lot (rural residential) residential opportunity areas are generally proposed to be unsewered for a MLS greater than 2ha. In some circumstances there may be an opportunity to provide smaller lots and these will</i></p>

Agency	Issues Raised
	<p><i>need to be connected to reticulated water and sewerage infrastructure.</i></p> <p>Goulburn</p> <p><i>Large Lot Dwellings</i></p> <p>Large Lot dwellings are proposed in four Precincts (Gorman Road, Mt Grey East, Mountain Ash and Brisbane Grove) in Goulburn with one area, Run'O'Waters, including a limited number of unserviced adjoining Large Lot Residential Serviced Residential development.</p> <p>In email correspondence of 4 December 2019, Council confirmed the Gorman Road large lot residential opportunity areas are largely occurring on the western flank of Gorman Road on land that is already cleared. WaterNSW is supportive of this approach as it avoids the vegetated areas that the SLWCA (for Unsewered Residential Development lots 4,000m² to 2Ha) identified as posing a High Risk to water quality. Some areas of Extreme Risk occur along the drainage features, and future lot configurations would need to be sensitive to the constraints presented by these features.</p> <p>WaterNSW is supportive of the Mount Gray East (seemingly incorporating former deferred Site 7) provided the land proposed for development is that land which is already cleared. The cleared land in this area generally has a Low to Extreme Risk to water quality (for Unsewered Residential Development Lots 4,000m² to 2Ha), with most Moderate Risk and the Extreme Risk areas being confined to drainage features. WaterNSW is supportive of avoiding the steep areas of vegetated land immediately east of this site which are generally High to Extreme Risk and therefore poorly suited to rural residential development.</p> <p>The Brisbane Grove and Mountain Ash areas are generally associated with a Low to Extreme Risk to water quality as based on the SLWCA for Unsewered Residential Development Lots 4,000m² to 2ha. Areas of Extreme Risk are generally associated with drainage features. There should be sufficient flexibility in this landscape to accommodate large lot dwellings. However, a number of drainage features in this area include 3rd and 4th order streams with large catchments. Buffer distances for EMAs may influence the projected lot yields in this Precinct, particularly for those areas between Mountain Ash Road and Windellama Road. Lot configurations will need to be sensitive to watercourse constraints. The Brisbane Grove area is generally less dissected by drainage features than Mountain Ash and may have greater propensity to meet the lot yields projected.</p> <p>The Run'O'Waters precinct includes an estimated 11 Large Lot dwellings as well as 1,693 residential dwellings. Relevant to the Large Lot dwellings, the SLWCA for Unsewered Residential Development Lots 4,000m² to 2Ha reveals that the land generally carries a Low to Moderate water quality risk, with an Extreme risk being associated with waterways. At face value, there appears to be sufficient capacity within this area to sustain 11 Large Lot dwellings as proposed. The position of EMAs with respect to nearby serviced residential development will need to be considered in any Planning Proposal and subdivision application for this area.</p> <p>The Strategy generally adopts a 2Ha MLS for Large Lot residential development, although the Tables on page xv identify the possibility of smaller MLS 2,000-4,000m² being supplied to the Large Lot Residential</p>

Agency	Issues Raised
	<p>land at Run'O'Waters Precinct only if water and sewer services become available (see page xv). WaterNSW supports this approach.</p> <p>Marulan</p> <p>Marulan is highly constrained in terms of being able to supply unsewered Large Lot Residential development. In previous correspondence, WaterNSW identified concerns with regard to unsewered development risks for urban areas to the north of Marulan, noting that the risk to water quality is predominantly High to Extreme in that area (based on the SLWCA for Unsewered Residential, 4,000m² – 2Ha lots; Figure 7 Appendix D). The revised Strategy (page xv) now advocates a possible staged approach to deliver the Serviced Urban Residential development to Marulan North.</p> <p>WaterNSW does not support the staged approach, and believes that the proposed Marulan North Precinct should be fully serviced with reticulated sewerage prior to residential development and occupation. For sewer development, the water quality for these general areas (combined) is Low to High with a Moderate Risk predominating except in the south-east of the Precinct which generally has a Low Risk to water quality. WaterNSW is therefore supportive of those aspects of the Strategy that seek to reduce water quality risks by ensuring that new urban development is sewer in these areas.</p> <p>The Strategy also proposes to accommodate Large Lot Residential (unsewered) development in an area referred to as Marulan South (Figure D). It appears this area is being put forward in place of former Deferred Area 16 which lies south of the railway line. Both former Deferred Area 16 and the current Marulan South Opportunity Area have significant water quality risk constraints. Based on the results of the SLWCA for Residential Unsewered Lots (4,000m² to 2Ha), both areas are characterised by Moderate to Extreme Risks to water quality, with most of the land being dominated by an Extreme risk. The Marulan South area contains a number of 1st and 2nd order drainage features and, as raised earlier, the constraints analysis, does not take into account that WaterNSW is generally not supportive of unsewered development occurring in this area.</p> <p>As an alternative, based on results of the SLWCA for Residential Unsewered Lots (4,000m² to 2Ha), areas south-west of Marulan between the Main Southern Railway and Hume Highway have land areas that vary from Low to Extreme Risk to water quality, with more areas of Low Risk potentially available for development. WaterNSW would welcome the opportunity to discuss with Council whether this area might be more suitable in providing a limited supply of Large Lot Residential housing.</p> <p>Large Lot Residential Demand and Supply</p> <p>The draft Strategy (Table 17) indicates that during the past decade there has been 820 approvals for dwellings, however there is no breakdown of dwelling approvals between serviced residential allotments and unserviced rural-residential allotments on larger blocks. This makes it difficult to understand the demand for unserviced rural residential type dwellings. The Strategy seems to use zoning as a surrogate for rural residential development, noting, that rural residential development is typically located in land zoned R5 Large Lot Residential, RU6 Transition and E4 Environmental Living and with MLSs ranging from 2,000m² to 10Ha depending on zoning and MLS requirements</p>

Agency	Issues Raised
	<p>(pages 55-56). The Strategy identifies that 290 lots have been created in Goulburn over the past decade while, over this same period, approvals have been granted for 200 dwellings. It concludes that there is around 4.5 years supply of large lots for Goulburn.</p> <p>It is not clear whether the figures of 290 and 200 have been derived from an analysis of R5 zoned land only (as stated on page 60), or derived from an analysis of RU6 and E4 zoned land (as implied on page 56). If the former, then the analysis would benefit by including lot demand and supply information for RU6 and E4 zoned land. It may well be that there is a greater available supply of rural residential land than suggested, thereby reducing the immediate need for further rezoning and changes to MLSs to facilitate more unsewered development.</p> <p>Section 9.1 Direction 5.2 Sydney Drinking Water Catchment</p> <p>The Draft Strategy overviews the key provisions and principles of the Section 9.1 Direction 5.2 Sydney Drinking Water Catchment in Appendix A, recognising its objective to protect water quality and that it applies to planning proposals within the SDWC. Inclusions of these provisions are supported. This section would also benefit by cross-referencing the results of the SLWCAs.</p> <p>State Environmental Planning Policy (Sydney Drinking Water Catchment) 2011.</p> <p>The Draft Strategy includes a brief summary about the role of the SDWC SEPP on pages 5-6 that would benefit by explicitly stating that the SEPP actually requires new development to have a NorBE on water quality. A similar statement could also be made in the last paragraph about the SEPP as contained in Appendix A.</p> <p>Sydney Drinking Water Catchment – Definition</p> <p>The draft Strategy (page 64) includes information about the SDWC, drawing from key requirements of the SDWC SEPP and Direction 5.2, as well as addressing key constraints to residential land use from a water quality perspective. These provisions are supported. The Strategy may benefit by including a link to a map of the Sydney Drinking Water Catchment as provided here:</p> <p>https://www.watarnsw.com.au/data/assets/pdf_file/0004/55975/Fact-sheet-and-map-Sydney-drinking-water-catchments.pdf</p> <p>Section 5 – Actions</p> <p>Strategy I1 (page 126) includes three actions to assist water quality and water management. WaterNSW is supportive of the three actions but makes the following suggestions:</p> <p>Action I1-1 requires the consideration of the impact of urban development on the SDWC in the Planning Proposal. This Action could be expanded to read "...consider the impact of urban development on water quality in the Sydney Drinking Water Catchment...".</p> <p>The action concerning the inclusion of WSUD in Development Control Plans (DCPs) should be numbered I1-3.</p> <p>Other Issues</p> <p>The maps presented in Figures C and 24 of the Strategy would benefit by clearer positioning the call out text so that it does not truncate Precinct boundaries.</p> <p>The Tables on page xv identify 30 Large Lot Dwellings for Gorman Road whereas Figure C identifies 24 lots. <i>Council Note: 24 is correct.</i></p>

Agency	Issues Raised
	<p>The paragraph at the top of page x regarding large lot development and the RU6 land at Marulan should be clarified in terms of the statements made and the arguments presented. The second sentence states that this 'does mean that the land is suitable for development'. Is the word 'not' missing from this sentence? It is also unclear how the argument to protect the said areas from fragmentation (urban or environmental) accords with the need for 10Ha allotments, and whether the fragmentation issue raised is in relation to fragmentation from urban or rural environments.</p> <p><i>Response/Comment:</i></p> <p><i>The Marulan North long term opportunity area requires protection from urban fragmentation. This has been clarified in the Strategy as 10Ha interim lots to allow the short term opportunity area contiguous to the existing town to develop first, and provision for future re-subdivision of the long term opportunity area as serviced 700sqm lots.</i></p>

5.4 Clarification

Water NSW's submission essentially advises that all development in Marulan precincts should be serviced by sewer. Additionally, it was evident from various submissions that clarity over the Marulan staging was required.

5.4.1 Marulan North

Opportunity areas have been revised to propose 10Ha lots in the interim for the future opportunity area with vehicle access from the south to maintain the effectiveness of the Gunlake Quarry haulage route. These lots would need a re-subdivision master plan that works with the layout of the short term opportunity area. The short term opportunity area is for 700sqm serviced residential lots, accessed from the south and with a layout facilitating future long term 700sqm lots further north.

5.4.2 Marulan South (re-named Marulan East)

The Large Lot Residential opportunity area identified in the revised Draft Strategy has resulted in submissions from Water NSW, DPIE Geoscience and Boral. Water NSW is concerned at the potential risk to water quality which is rated as generally extreme in this location for unsewered residential development in Water NSW' Strategic Land and Water Capability Assessment (4,000sqm–2ha lot size). DPIE Geoscience and Boral both raised concern regarding future residential interface with the railway side line to the quarry. The main issue, is however, the risk to water quality for unsewered residential development, as identified by Water NSW, which is the basis for excluding the area for inclusion as a Large Lot Residential Opportunity area in the Strategy.

5.4.3 Large lot residential demand and supply

In determining supply of rural residential land, the analysis went beyond land zoned R5 to determine supply. Council also undertook an assessment of rural and environmentally zoned land within the Strategy investigation area to determine the number of remaining lots available.

To determine supply, Council also looked at the subdivisions which had occurred within the unsewered land zoned rural or environmental within the Strategy investigation area and looked at the time taken between the subdivision being approved and the approval of applications for dwellings. Therefore, on this basis it is considered that the estimates in the Strategy for this category of development are as accurate as they can be with the data available.

5.5 Key Issues Second Exhibition

The key issues raised during re-exhibition are summarised in the following table. The table also includes a comment by way of response.

Issue	Response
Biodiversity and validation of HEV data	<p>Validation of HEV has proven to be almost impossible over the whole of the precinct areas. This is due mainly to the age of the data sets that are published for HEV. Since the data sets are unreliable, it is going to be a matter of assessment with each subsequent Planning Proposal to ground truth and determine extents of HEV on each property and associated constraints.</p> <p>HEV data has not been validated for all the precinct areas as this is considered to be a hugely expensive task for a fairly high level strategy. This point has been made clearer in the Strategy.</p> <p>Planning proposals will be dependent on the validation of HEV to occur subject to further assessment of the land identified in the Strategy.</p> <p>No areas with an environmental zoning are proposed to be rezoned to another category. Refer Strategy Actions H1-1 and H1-2.</p> <p>Opportunities for strategic biodiversity certification under the <i>BC Act 2016</i> will be considered with future planning proposals following the adoption of the Strategy.</p>
Precinct Maps	<p>Minor corrections have been made to improve legibility of the precinct maps. Please note that where HEV and Bushfire Prone Vegetation Category 1 overlap, the result is a light brown colour on the maps.</p> <p>Where an opportunity area is identified, boundaries are indicative only and need to be refined based on various site-specific studies prior to any development.</p>
South Marulan Large Lot Residential and Effluent Management Areas (EMAs)	<p>Further consideration of South Marulan's suitability for unserviced Large Lot Residential use will need to be undertaken in light of the water quality issues and interface issues raised in the DPIE (Geosciences) and Boral submissions. The existence of this opportunity precinct also acts as a trigger for other submissions seeking expansion of the rural residential opportunity area which is not a desirable outcome for this area.</p> <p>In an earlier Draft of the Strategy (pre-exhibition), the EMA 100m buffer was identified on the constraints and opportunities maps for the relevant precincts where rural residential opportunities were identified. The inclusion of the EMA buffers in the mapping resulted in the maps being very hard to read. It was for this reason that a written comment about this constraint was included to the relevant precincts being the: Mt Gray East, Mountain Ash, Brisbane Grove and Marulan South precincts, but has now been included in other</p>

Issue	Response
	<p>precincts where smaller areas of rural residential is identified, such as Gorman Rd.</p> <p>Given the nature of the Strategy, the identification of opportunity areas and yields is by necessity based on a very broad consideration. Essentially to go into much more detail will require more targeted analysis which should occur at the planning proposal stage. It is agreed that this may result in lesser yields than those specified in the Strategy. This point has now been made clearer in the Strategy.</p>
Gas Pipeline	<p>DPIE's submission specifically advises in relation to the gas pipeline that Council refer to the Department's Planning Circular in the Strategy in relation to buffer and other mitigation requirements for development proposals on land adjoining the Gas Pipeline.</p> <p>The circular mainly relates to the provisions of SEPP Infrastructure, in particular Clause 66C which requires the consent authority to:</p> <ul style="list-style-type: none"> a) be satisfied that the potential safety risks or risks to the integrity of the pipeline that are associated with the development to which the application relates have been identified, and b) take those risks into consideration in the assessment of development. <p>In taking 'those risks into consideration' it is acknowledged that the construction type, size, depth and the type of dangerous good within each of the high pressure pipelines listed under clause 66C will vary, resulting in each pipeline having a different risk profile.</p> <p>There are certain types of developments such as high density residential, commercial or sensitive uses such as hospitals, schools, child care and aged care facilities which should be considered more carefully by the consent authority as they may introduce a higher or more vulnerable population near the pipelines listed under clause 66C.</p> <p>Such development should consider preparing a risk assessment as part of the development application to demonstrate that the development will comply with the risk criteria for land use safety planning published in <i>Hazardous Industry Planning Advisory Paper No. 4 – Risk Criteria for Land Use Safety Planning</i>. It is important to have a comprehensive understanding of the hazards and risks associated with the operation of the pipeline and of the adequacy of safeguards.</p> <p>In assessing the tolerability of risk from high pressure pipelines, both qualitative and quantitative aspects need to be considered.</p> <p>Any quantitative (numeric) risk assessment should be consistent with the principles published in <i>Hazardous Industry Planning Advisory Paper No. 6 – Hazard Analysis</i>. The risk assessment is to be performed by a suitably qualified professional. This assessment is the responsibility of the applicant and must be undertaken in consultation with the pipeline operator. The risk assessment will need to be undertaken by the proponent at the planning proposal stage.</p>
Prioritisation of opportunity areas	<p>The short, medium and long term prioritisation of precinct opportunity areas is based on an assessment of how much land is needed and how well placed each precinct is to provide it in the</p>

Issue	Response
	<p>short term. It is acknowledged that some landowners are ready and willing to develop their land immediately, while others may wish to retain larger blocks and not subdivide at all. The market will also play a role in pricing, the speed of land uptake and dwelling construction. This means that in practice, the 'medium and long term' may arrive faster in some precincts than others.</p> <p>The identification of the Baw Baw, northern section of Middle Arm and Marulan North Precincts as a longer-term priority is based merit relative to the other precincts identified and the need for the release of this area in the short term given the identification of supply elsewhere. These areas are recognised as providing development opportunities once the other precincts have been filled, but could be brought forward if other precincts are not developed in the short to medium term.</p>

6 Final Review for Adoption

The consultation for the Strategy has been undertaken in three stages with opportunities for feedback throughout the process. The initial consultation highlighted a number of issues that needed to be considered in the delivery of housing.

The feedback received following each of the two Public Exhibition periods has been included into the Final Strategy document for consideration by Council.

6.1 Closing Consultation

Council at its meeting of 21 April 2020, considered a post exhibition report on the revised version of the Strategy. The report noted that Council had received twenty two public submissions in response to the second exhibition of the Strategy (which occurred between 18 October 2019 and 18 December 2019). A presentation was made to the Council Meeting on behalf of Gunlake Quarry and another on behalf of the owner of 515 Crookwell Road, Kingsdale, in relation to the recommendations in the Strategy. Following deliberation, Council subsequently resolved to defer the adoption of the revised Strategy for a period of three months to enable further consultation with submitters and hold an additional Councillor Briefing session. Discussion at the Council Meeting centred on the need to provide “closing consultation” for those who had made submissions to the second version of the Strategy.

Closing consultation was undertaken by advising those who had made submissions on the revised version of the strategy that Council would accept additional information further supporting their previous submissions for a period of three weeks. The three weeks concluded on 13 May 2020 prior to the Council Briefing session held on 16 May 2020. A total of seven submissions were made during this closing consultation process in support of previous submissions made to the revised strategy. One additional submission was received from the Southern Highlands Progress Association in support of the submission from Tomasy Planning (for inclusion of Glenrock, Highland Way, Marulan as an opportunity area for rural residential).

6.2 Council Resolution 2020/224

A separate report on the closing consultation was presented to a Council Meeting on 16 June 2020. The report addressed the additional submissions and issues surrounding the closing consultation only.

Council at the 16 June 2020 meeting resolved that:

- » The Draft Urban and Fringe Housing Strategy be presented to Council for adoption at the meeting of 21 July 2020 subject to the following amendments:
 - a. The Precinct Map – Opportunities and for Marulan North to be amended to identify the haulage route as having a 250m buffer from development between Brayton Road, Ambrose Road and Red Hills Road through to the Hume Highway.
 - b. The Consultation Report be amended to include commentary/to address the submission from Boral (dated 16 December 2019) and to expand upon the assessment of the Boral submission dated 18 December 2019.
- » The Draft Urban and Fringe Housing Strategy be amended to identify a corridor to the east of the ridge line parallel to Crookwell Road, zoned E3 Environmental Management between Chinamans Lane and Onslow Road following Crookwell Road, as a rural residential

opportunity area for lots with a minimum allotment size of 10Ha (reduced from 100Ha). A 1Ha lot size being identified in consideration of potential water quality impacts.

- » The Draft Urban and Fringe Housing Strategy be amended to identify the area zoned RU2 Rural Landscape and E3 Environmental Management located on the eastern side of the Hume Highway, Highland Way through to Barber's Creek Road (north of the railway line) as a rural residential opportunity area for lots with a potential for 10Ha minimum allotment size (reduced from 100Ha), the 10Ha lot size being identified in consideration of potential water quality impacts.

A copy of the Council Reports dated 21 April 2020 and 16 June 2020, Resolutions and Attachments is provided in Appendix B of this Consultation Report.

6.3 Adoption of Final Strategy

The changes outlined in Council Resolution 2020/224 were made, and the Final Strategy, Consultation Report and Appendices was presented to the 21st July 2020 Council Meeting for adoption.

6.3.1 Council Resolution 2020/261

At the 21st July 2020 meeting Council resolved that:

1. The report from the Director Planning & Environment be received.
2. Council adopt Urban and Fringe Housing Strategy subject to the following amendments:
 - a. Crookwell Road - an area of approximately 52.93 hectares be included, relating to a portion of 515 Crookwell Rd and east of the ridgeline that does not drain to the Sooley Dam Catchment as identified in the map below, for consideration of 2 hectare lots.



- b. The reference to the Brayton Road haulage route at Marulan be amended to read the Gunlake Quarry haulage route comprising of Brayton Road to the Hume Highway including Red Hill and Ambrose Roads.
3. Council refer the adopted Urban and Fringe Housing Strategy to the Department of Planning, Industry and Environment for endorsement.

The minor amendments outlined in Council Resolution 2020/261 have now been made to the Strategy.

Appendices

A Exhibited Materials

A-1 Talk of the Town

A-2 Key Sites Assessment (First Exhibition)

B Council Documents

B-1 Council Meeting Business Paper Enclosure 21 April 2020

B-2 Council Report Post Exhibition Review 21 April 2020

B-3 Council Minutes Post Exhibition Review 21 April 2020

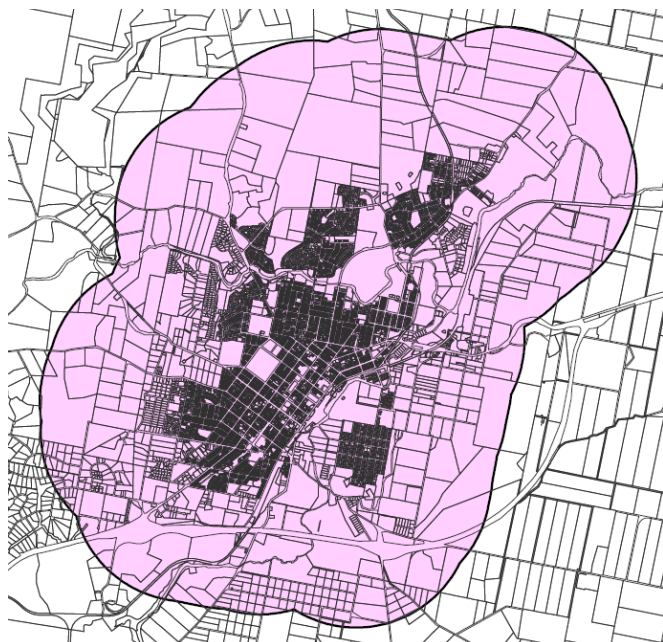
B-4 Council Meeting Business Paper Enclosures 16 June 2020

B-5 Council Report Closing Consultation 16 June 2016

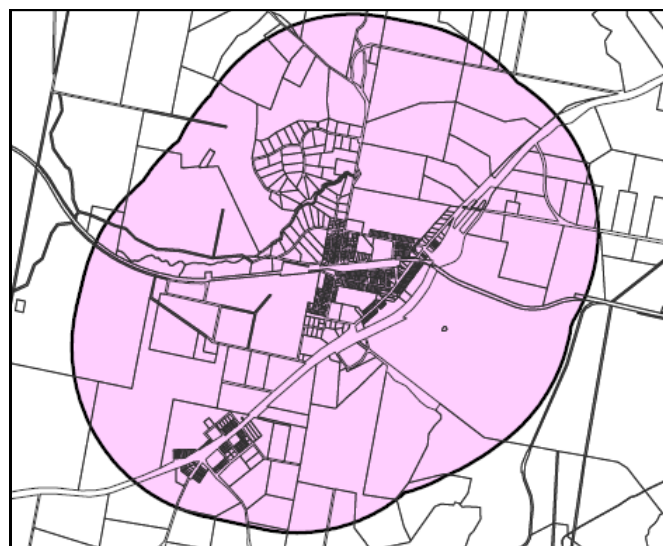
B-6 Council Minutes Closing Consultation

A Exhibited Materials

A-1 **Talk of the Town**



Goulburn Study Area for Housing Strategy



Marulan Study Area for Housing Strategy

Contact Us

Address: 1 184 – 194 Bourke Street
GOULBURN NSW 2580
Phone: 4823 4444 - Fax: 4823 4456
Email: council@goulburn.nsw.gov.au

Website: <https://yoursay.goulburn.nsw.gov.au>
www.facebook.com/goulburnmulwareecouncil

Schedule of Consultation Events	
Date	Event
9th April—25th May	Consultation Period Library and Foyer Pop Ups
3rd May, 5:30pm	Marulan Workshop Community Hall (170 George Street)
10th May, 5:30pm	Goulburn Workshop Council Chambers (184-194 Bourke Street)
15th May, 2-6pm	Marulan Drop In Community Hall (170 George Street)
17th May, 4pm	Industry Workshop Facilitated Session
22nd May, 2-6pm	Goulburn Drop In 213-215 Auburn St



TALK OF THE TOWN

We want to talk...

..about housing in *your* town



Housing Strategy—Pre-Strategy Consultation

THE PROJECT

Council is interested to hear what you have to say about housing to accommodate growth in Goulburn and Marulan over the next 20 years before we start preparing a Housing Strategy.

To give some background and start you thinking we've prepared five ***Talk of the Town: Housing Residential Growth*** information sheets:

- ◇ **Sheet 1: Background**
- ◇ **Sheet 2: Affordability, infrastructure & Council's role**
- ◇ **Sheet 3: Social needs & opportunities & Environmental considerations**
- ◇ **Sheet 4: The Role of planning policy & principles to guide decision-making**
- ◇ **Sheet 5: Study area maps**

The information sheets, this pamphlet and online survey questions form the basis of the consultation.

At the conclusion of the consultation period staff will collate the feedback received and it will be used to inform the preparation of a Housing Strategy for Goulburn and Marulan.

This strategy is to be prepared by a consultancy in close association with Council's Strategic Planning branch. Preparing the strategy will involve detailed investigations and research.

It is anticipated that the draft strategy will be prepared by October. At that time the draft Strategy will be placed on public exhibition for further community feedback.

WHAT WE WANT TO KNOW

We are keen to hear what you think the key issues are that need to be taken into account when preparing the Housing Strategy. We are interested in finding out what kind of housing options should be provided and where.

Should we have single houses, duplexes and granny flats or more dense developments such as shop-top housing, villas, terraces and apartments or a combination of all?

Where are these different types of housing best suited?

What makes a town a good place to live?

How affordable do you think it is to live in Goulburn and Marulan?

What do you want the urban areas of Goulburn and Marulan to look like in 20 years?

Do you agree with our principles for decision making on housing in 'Talk of the Town Information Sheet 4'?

If you have an opinion we would like to hear it!

There's a variety of ways you can have your say on this important project.....



"Tell us what you think!"



YOUR INVOLVEMENT

The program of events is included in this pamphlet.

But we will be doing our best to make sure you know what's happening. We have created a project page with all the key documents and information—visit

<https://yoursay.goulburn.nsw.gov.au/projects/urban-fringe-housing-strategy>

Hard copies of the information sheets are available at the Civic Centre and Library located at 184-194 Bourke Street, Goulburn.

As well as our online platform we will be accepting written submissions.

Please send your submission clearly indicated as 'Housing Consultation Submission' to the General Manager via any of the following methods:

- Email council@goulburn.nsw.gov.au
- Post to Locked Bag 22, Goulburn NSW 2580
- Hand to Customer Service staff at the Civic Centre, 184-194 Bourke Street, Goulburn

The exhibition period will conclude on 25 May 2018.

For any enquiries or if you want to discuss your submission please contact Council's Strategic Planning Team (Bennett, Alex, Nick or Emma-Jayne).



TALK OF THE TOWN

Housing Residential Growth

Sheet 1 of 5

We are investigating housing in Goulburn and Marulan to create a HOUSING STRATEGY that will guide residential development in and around these urban centres over the next 20 years.

We will be developing a similar strategy for the villages and rural areas when this one is completed.

THE CHALLENGE IS TO HOUSE..

5700 more people over the next **20 years**

(Current Goulburn Population: 23,635)

(Current Marulan Population: 1,178)

These figures were provided by the Department of Planning and Environment for the whole LGA however the majority of development will be around Goulburn and Marulan. The total population for Goulburn Mulwaree in 2018 is 30,010.

To give you an idea of what that rate of dwellings per year looks like, between 2009 to 2017 (8 Years) **583** Lots were approved in the Marys Mount in Goulburn alone (=72 lots per annum)



By comparison, between 2007-2017, 1,303 dwellings (total of all configurations) were approved in the whole of Goulburn city. That's an average of 130 residences p.a.

Estimated Household size

2.1 – 2.3

Persons per household

Approximately

2,478-2,714

Dwellings

The more people per house the fewer dwellings

That averages out to about

130

Dwellings per year



TALK OF THE TOWN

Housing Residential Growth

Sheet 1 of 5

Starting the discussion.....

Development of the Marys Mount release area in Goulburn has taken up approximately 82.4 hectares of land (that's 100 rugby league fields). Additional lots in the pipeline will occupy a further 90.7 hectares (that's 107 rugby league fields) in Goulburn and 49 hectares in Marulan.

With an estimated 500 additional lots in the pipeline (just for Marys Mount), this would indicate that we have an adequate supply for the next five years and don't need to rezone land immediately.

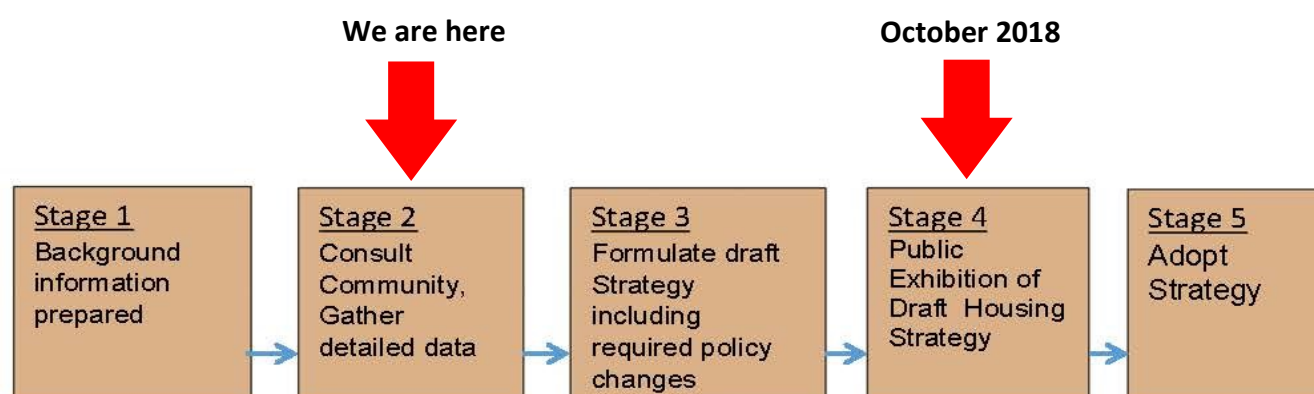
To discuss housing residential growth and before we prepare the Housing Strategy there are a number of issues that need to be discussed.

These issues are outlined in the accompanying Housing Residential Growth sheets, including:

- ⇒ Affordability (Sheet 2)
- ⇒ Infrastructure to support growth (Sheet 2)
- ⇒ Council 's role (Sheet 2)
- ⇒ Social needs & opportunities (Sheet 3)
- ⇒ Environmental considerations (Sheet 3)
- ⇒ The role of planning policy (Sheet 4)
- ⇒ Planning Principles to guide our decision making (Sheet 4)

Housing Strategy Study Area & Process

Two areas are the focus of residential growth for this discussion; the Urban area and the Fringe area (see the maps on Sheet 5) for both Goulburn & Marulan. We are engaging with the community at any early stage so that feedback can inform preparation of the Draft Strategy.





TALK OF THE TOWN

Housing Residential Growth

Sheet 2 of 5

Affordability

Affordability is a big issue. We know, big house, big price but conversely smaller house, smaller price.

Not everyone wants or needs to live in a 3+ bedroom house. Indeed a 2 bedroom apartment can be more affordable close to the urban centre with easy access to shops, entertainment and other services. This type of housing can suit many lifestyles and family circumstances and can be bought for a fraction of the cost of a detached dwelling on the outskirts of town.

Housing affordability can be addressed with rezoning of land to maintain the supply of residential building blocks, combined with ensuring a range of housing options (including smaller dwellings) to cater for different households. The end result should be that the supply and type of housing to meet future demand should keep pace with demographic trends.

Goulburn	Mar 2018	2017	2006
Median House price and rental	\$400,000	\$374,000	\$210,000
3 Bedroom detached dwelling (to buy)	\$375,000	\$339,000	\$210,000
(Rent)	\$350	\$330	-
2 Bedroom Apartment (to buy)	\$240,000	\$194,000	\$170,000
(Rent)	\$245	\$220	-

Infrastructure

Goulburn and Marulan are located in the Sydney Drinking Water Catchment therefore all new housing blocks on the edge of town must be connected to sewerage services. The cost of extensions and augmentation is passed on to land purchasers. Adding more housing in established areas avoids this cost.

Accommodating growth in population comes with other infrastructure requirements such as power and gas but also the requirements for schools, roads and walkways, open space, sports fields and amenities and infrastructure such as libraries, community and youth meeting spaces and art & cultural facilities.

However our urban areas develop, these matters need to be considered up front in order to create liveable communities whose development does not place an unreasonable burden on existing residents and services.



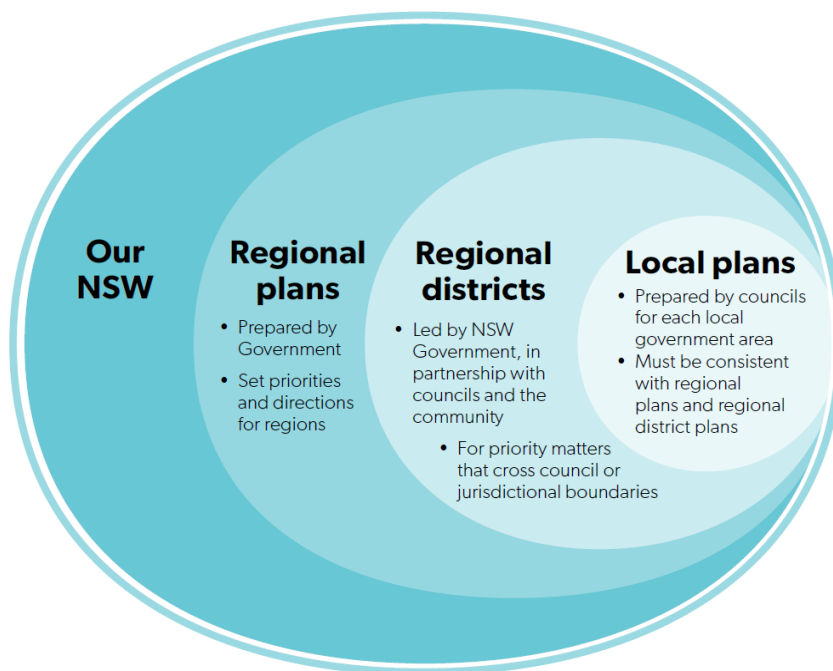
TALK OF THE TOWN

Housing Residential Growth

Sheet 2 of 5

Council's Role

The Housing Strategy is a **Local plan** that will identify (through recommendations and actions) **what** sort of residential growth occurs, **where, when** and **how** in and around the urban centres of Goulburn and Marulan. The graphic is a visual representation of the broader strategic planning framework within which our work on housing will sit and have to align with.



Council has a leadership role in influencing the development of quality housing which meets the needs of the community.

Council can do this by:

- Undertaking robust and genuine community and stakeholder consultation
- Hearing community expectations and ideas and responding appropriately
- Using evidence, best available data and predictions to formulate policy actions
- Aligning housing policy with other strategic plans of Council and the State
- Integrating land use and infrastructure planning and delivery to create high quality living environments that bring growth
- Applying appropriate zoning to land and controls for housing in order to facilitate quality developments that are practical and have lifestyle and amenity aspects that contribute to quality of life
- Facilitating the housing industry and growth by providing high quality technical advice and support

The Housing Strategy that Council is preparing will consider **your submissions, responses to our online survey and responses we receive at workshops and drop-in days**. So check out <https://yoursay.goulburn.nsw.gov.au/projects/urban-fringe-housing-strategy> for more information or call Council and speak to a member of the Strategic Planning team.



TALK OF THE TOWN

Housing Residential Growth

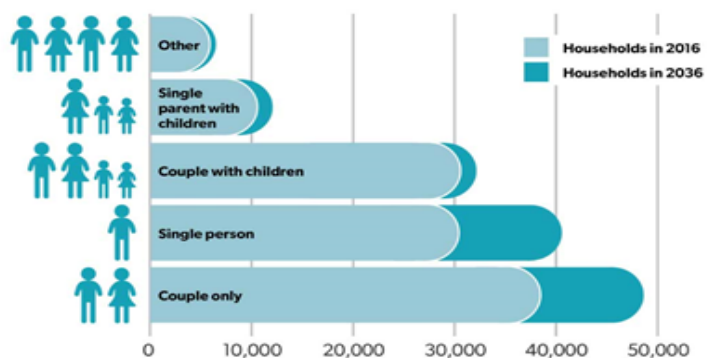
Sheet 3 of 5

Social Needs & Opportunities

Changing Social Demands

Social changes have a direct impact on the demand for different types of housing. Population growth alone does not give the full picture. Census data means that, over time, we can see trends developing. The table from the South East & Tablelands Regional Strategy shows how household size is predicted to change in the region. These changes will have an impact on the demand for different types of housing.

Household Composition Forecast 2016-2036



Dwelling types in South East Tablelands and ACT (2011)

In future the demand for smaller one and two bedroom houses & units will increase. The

demand for large family sized dwellings may continue, but the demand for smaller, energy efficient and lower maintenance housing with good access to services and facilities will likely increase.

The number of those aged over 65 compared with younger population groups is predicted to increase (this is an ageing population) consistent with many other places in Australia and the developed world. This has implications for housing also.

Inclusive Housing

Changes in family and personal circumstances can result in a need for short term crisis accommodation. The need for such accommodation is important to consider in the housing mix. Employment and study can also drive the need for housing e.g. accommodation for short-term or contract workers or students. Housing that is suitable for all ages, life stages and abilities (known as adaptable housing) will allow flexibility to accommodate population growth and address the needs of residents. Housing for older people will become a priority as the population ages in the next 20 years.

Opportunity

Our Housing Strategy will set a direction to address the housing needs of our population and help guide what our communities will look like. The Housing Strategy should include actions to encourage developers to build the range of accommodation and dwelling types that will match the social needs of our growing population. It should also include actions that contribute towards liveable, safe and healthy communities. These actions can then be expressed through Council policy.



TALK OF THE TOWN

Housing Residential Growth

Sheet 3 of 5

Environmental considerations

A key consideration in planning communities is preservation of environmental values for amenity, sustainability and quality of life. Some existing urban land and fringe land contains environmentally significant vegetation communities protected by State legislation. It is important that these areas are identified, zoned appropriately and avoided for more intense development. It is also important to identify waterway corridors and protect these from degradation which may impact water quality.

The urban environment can contribute significantly to environmental quality and habitat for native animals through appropriate street tree and park/reserve plantings, urban and community gardens and protection of remnant vegetation in corridors across the landscape.

Vegetated areas are susceptible to bush fire and subdivisions and housing need to be designed to reflect that risk.

These factors will be considered when determining areas suitable for additional residential development.

Living on the Edge: Issues on the urban fringe

Extending the urban boundary into agricultural and environmentally sensitive areas can create potential land use conflicts and make developing land difficult.



Some effects of living near land used for agriculture include smells, noise, animal behaviour, transport movement and pasture improvement methods. This may result in complaints and the farmer's management practices and subsequent livelihood being restricted.

Our area also has significant quarry rock resources that are often hauled by heavy vehicles. Avoiding future urban areas that may be affected by such activities is important.

Land use conflict arises when incompatible land uses are located within insufficient distance of one another or without appropriate barriers to avoid negative impacts.

These impacts on the fringe can be reduced by maintaining a buffer area or separation distance between the rural and urban boundary and identifying a mix of compatible land uses.

The Housing Strategy has a key role in guiding policy around these issues and determining the best areas for settlement that avoid land use conflict issues.



TALK OF THE TOWN

Housing Residential Growth

Sheet 4 of 5

The role of planning policy

Determining what housing goes where

The Goulburn Mulwaree Council (GMC) Local Environmental Plan (LEP) 2009 is the primary document that determines **what** can be done **where** (which is also why maps are so important in planning) by allocating a land use zone to the land. Each zone includes a range of land uses that are permissible and prohibited in that zone. A rezoning is simply a change in the zoning of land from one zone to another.

The LEP guides such things as building heights, subdivision, lot size and the size and coverage of buildings on a block. The LEP is also the place where buildings are identified as listed heritage items or identified as being within a heritage conservation area.

There is some flexibility with the kinds of planning controls that Council can have in its LEP but changes must be consistent with the NSW Government LEP template that applies across the State.

Determining how housing is developed

The GMC Development Control Plan (DCP) 2009 provides the detail around **how** development of land can be undertaken.

Housing provisions in the DCP include guidelines on building setbacks, subdivision & house design, standards for roads, development of heritage items, standards for open space required per dwelling, fences and development on flood prone land.

These controls can be much more detailed than in the LEP, aren't subject to a standard format and can be entirely approved by Council.

Why have your say?

The Housing Strategy that Council is preparing will consider **your submissions, responses to our online survey and responses we receive at workshops and drop-in days**. So check out <https://yoursay.goulburn.nsw.gov.au/projects/urban-fringe-housing-strategy> for more information or call Council and speak to a member of the Strategic Planning team.

The recommendations of the Housing Strategy when it is prepared will guide changes to both the LEP & DCP to achieve the outcomes for housing identified through both consultation and detailed technical investigations.

It will also guide where, how and when any additional residential areas (including rural residential areas) are released for development to cater for population growth over the next 20 years. It will also help Council to provide corresponding infrastructure and services efficiently.

The Strategy will be the Local Plan that will form part of the hierarchy of documents within the Strategic Planning framework (see Sheet 2).



TALK OF THE TOWN

Housing Residential Growth

Sheet 4 of 5

Principles to guide our decision-making

Making decisions about where, how, when and in what form housing is to be provided to accommodate population growth over the next 20 years needs to be based on the best data we have access to and grounded by a set of principles based on best practice. We have compiled a set of principles below to start the discussion....

APPROPRIATE ZONES & CONTROLS

- A palate of zones should be applied both in the urban centre and on the fringe based on the characteristics of land including those to encourage the protection of existing environmentally sensitive areas.
- Protect areas that contain important resources and minimise the potential for land use conflict.
- Maintain & enhance links with the natural environment for recreational use and animal habitat and apply a zone which reflects that function.
- Minimise the impact of housing and related development like sheds on the landscape, particularly on the fringe.
- Protect areas of high environmental value, scenic value and cultural heritage value.

INCREASING DENSITIES TOWARDS THE CENTRE OF TOWN

- Focus urban areas where residents can access services, jobs and transport.
- Protect the Region's water supply and the environmental qualities of rivers and streams.
- Generally not apply a subdivision lot size to an area that is less than a lot size closer to the centre of town.
- Development should be maximised closer to available services and traffic infrastructure.
- Not support any rezoning that would result in isolated pockets of residential land away from the existing urban boundary.
- Protect important agricultural or resources land from encroachment by housing on the fringe.
- Staging of land release must begin closest to the existing urban boundary.

PROVIDING A VARIETY OF HOUSING OPTIONS

- Provide affordable housing opportunities in Goulburn and Marulan that respond to demographic change.
- Allow sensitive and complementary development and adaptation for housing in heritage areas.
- Apply design excellence to medium density and multi-dwelling housing opportunities.
- Provide a mix of housing options in medium density multi-dwelling developments.
- Design new neighbourhoods so they are environmentally sustainable, socially inclusive, easy to get to, healthy and safe.

STAGING OF LAND RELEASES

- Provide measurable milestones for the release of land so that take-up and remaining supply can be readily determined.



TALK OF THE TOWN

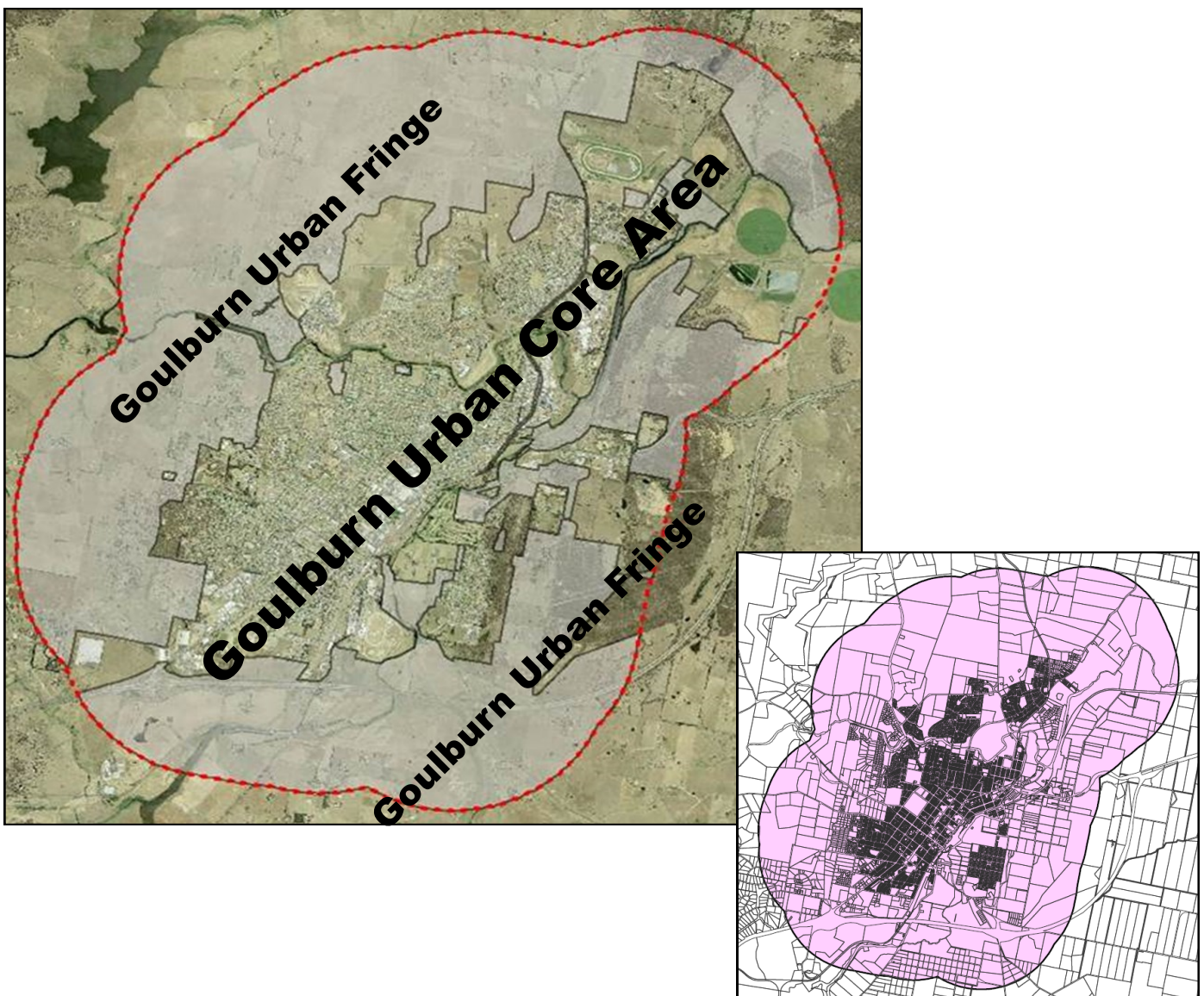
Housing Residential Growth

Sheet 5 of 5

Our Study Area for the Housing Strategy— Goulburn

The aerial photo below is of Goulburn. The unshaded area towards the centre is classified as the urban core. The shaded area represents the urban fringe which is the area between the urban core and the rural area beyond.

The Housing Strategy will address housing development in the urban core of Marulan and Goulburn based on predicted population growth. Detailed investigations may identify potential new land releases for residential or rural residential development on the fringe.





TALK OF THE TOWN

Housing Residential Growth

Sheet 5 of 5

Our Study Area for the Housing Strategy—Marulan

The aerial photo below is of Marulan. The unshaded area towards the centre is classified as the urban core. The shaded area represents the urban fringe which is the area between the urban core and the rural area beyond.

The Housing Strategy will address housing development in the urban core of Marulan and Goulburn based on predicted population growth and detailed investigations may identify potential new land releases for residential or rural residential development on the fringe



A-2 **Key Sites Assessment (First Exhibition)**

Site Assessment - Opportunity Sites

Goulburn Mulwaree Urban Fringe and Housing
Strategy

Client: Goulburn Mulwaree Council

Date: 17 December 2018

Contact:

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Prepared by	Claire Adams & Phil Burns
Reviewed by	Liz Densley
Date	17 December 2018
Version	Site Assessment V2

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1 Introduction

The Urban and Fringe Housing Strategy (Strategy) has been prepared in response to continuing pressure from residential growth and an increasing shortage of available, zoned residential land, particularly in Goulburn.

The Strategy seeks to identify the future housing needs for Goulburn and Marulan and provide recommendations to guide land use decisions and local policy.

The Strategy has been developed in two phases with the first phase being the initial community and stakeholder engagement undertaken by Council in April and May 2018. This Phase of the project established the issues and tested these with stakeholders and the community.

A number of landowners have made representations to Council over the past ten years requesting that sites be rezoned or considered as part of any review of the Goulburn Mulwaree Local Environmental Plan (GMLEP). There are 39 sites in total and the general response to these requests has been to deferred consideration until a comprehensive review has commenced.

The Housing Strategy process provided the opportunity for an assessment of the 39 sites in the context of the broader review of housing in Goulburn and Marulan.

1.1 Methodology

As part of the development of the Strategy, consideration has been given to 39 individual requests for land to be rezoned since 2009. These included Planning Proposals that were considered and deferred by Council and representations in submissions and letters and includes Site 39 which is surplus public land. The sites are identified in Figures 1 and 2 below.

In the first instance the sites were mapped and a set of criteria were established to provide an assessment tool by which sites could be considered. Most of these sites occurred within or close to the urban fringes of Goulburn and Marulan, however, the majority were seeking a land use zone that would allow subdivision for lifestyle lots, un-serviced and having an area of 2ha or more. The following criteria were included in the assessment of 39 sites previously identified.

The scope of the Strategy addresses urban land and the supply of additional land for residential purposes on the fringe of the urban areas of Marulan and Goulburn. Proposals which fall outside this area were not considered for any form of residential development. Council could consider additional criteria that would need to be addressed prior to Council considering a Planning Proposal for rural lifestyle development outside the area identified in the Strategy. An example of such criteria is demonstrated is included below.

Identification and assessment of each these sites have been undertaken at a strategic level as part of the Housing Strategy process. The outcome of the assessment is provided in section 2.

1.2 Infrastructure

The release of land for residential development needs to be considered in the context of the availability of infrastructure; water, sewer, roads, telecommunications. Goulburn typically requires lots less than 4,000m² to be serviced. Servicing adds a significant cost to development. Generally, the proposals submitted to Council did not propose connection to infrastructure.

1.3 The Sites

38 sites have been identified by landowners for rezoning consideration. The Sites are numbered in the following two figures and described in the tables that follow.

Figure 1 Goulburn Sites

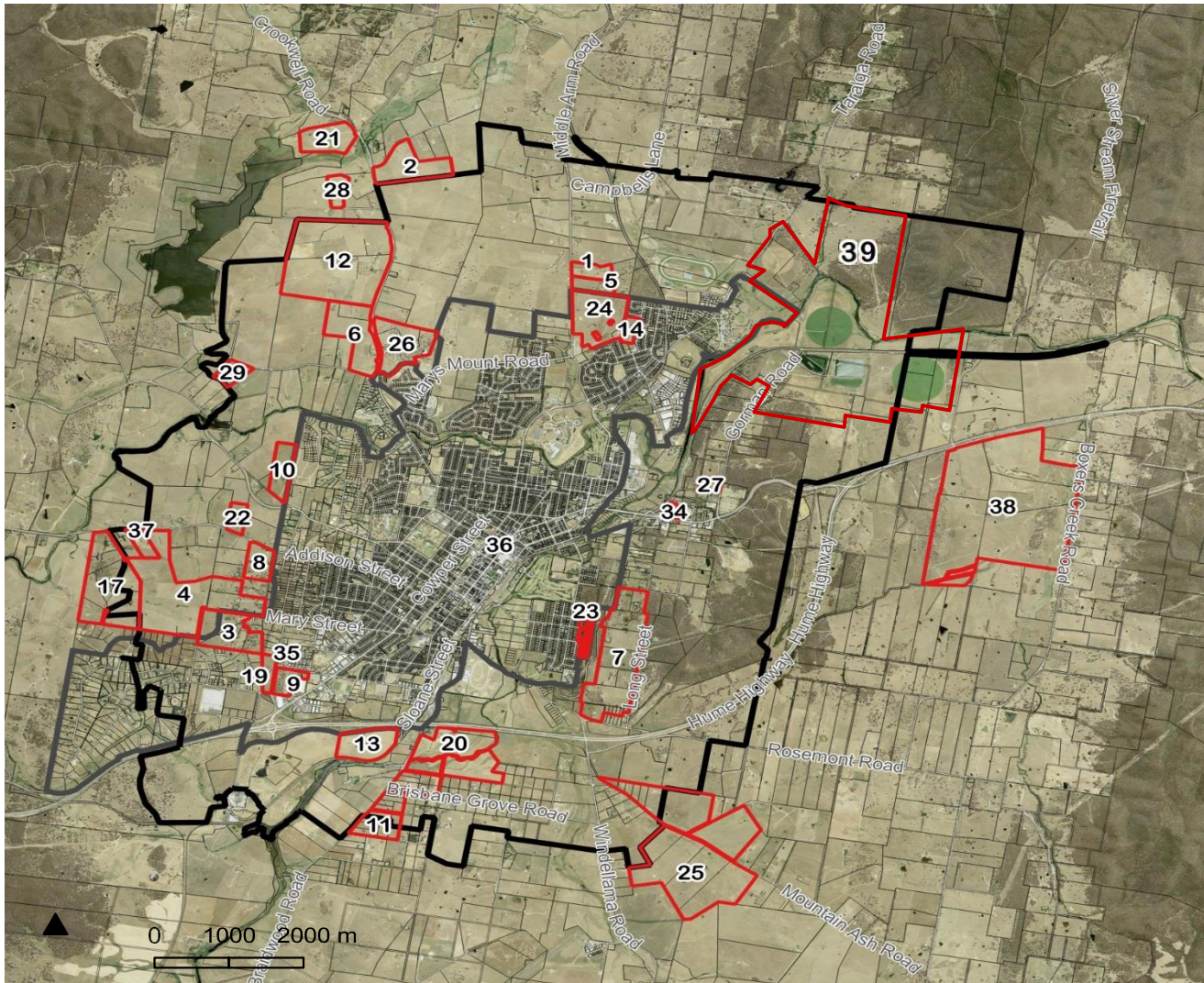
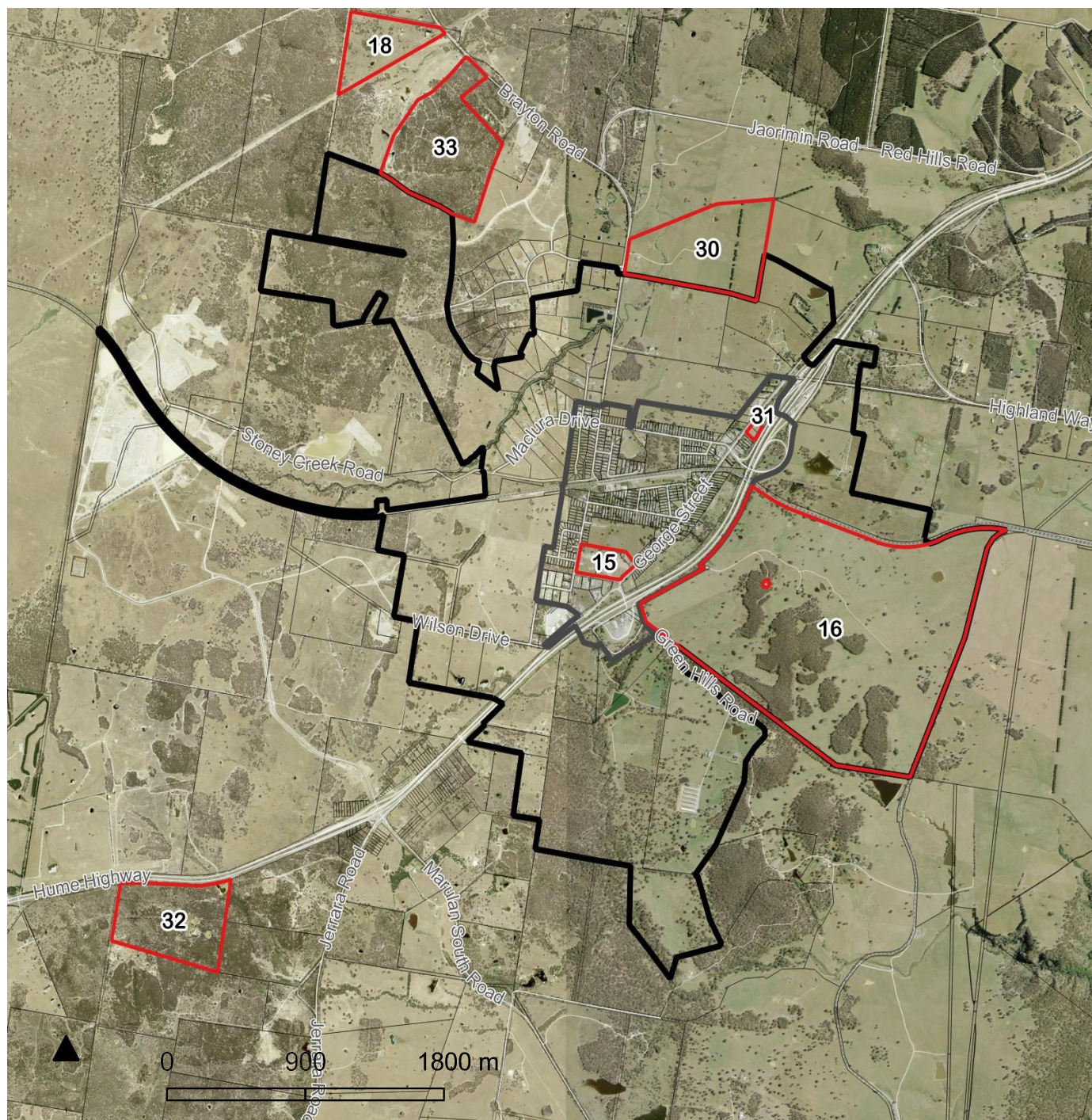


Figure 2 Marulan Sites



Goulburn Opportunity Sites

Site	Location	Area (ha)	Current Zone	Current Lot Size (ha)	Requested Zone/MLS	Expected Lot Yield	Supported?
1	Goulburn North (78 Middle Arm Road)	12.47	RU6 Transition	10	R2 Low Density Residential 700m2	142	Yes
2	Goulburn North (28 Kingsdale Road)	39.82	E3 Environmental Management	100	10-20ha MLS	5-10	No
3	Goulburn West (Ridge Street, Shannon Drive and Bushes Lane)	43.14	R5 Large Lot Residential RU6 Transition	2,000m2-2ha	R5 Large Lot Residential 2,000m2 MLS	173	No
4	Goulburn West (Ridge Street and Gurrundah Drive North of Shannon Drive)	132.26	RU6 Transition	2	<i>No zoning change 20,000</i>	53	No
5	Goulburn North (44 Middle Arm Road)	11.90	RU6 Transition	10	R2 700	136	Yes
6	Goulburn North (407 and 457 Crookwell Road)	50ha	RU6 Transition	10	R2 Low Density Residential 1,500 MLS	200	Yes
7	Goulburn Charles Valley (163, 195, 227, 257, 287 Long Street. 2 & 4 Chiswick Street, Rifle Range Road (3x))	108.89	RU2 Rural Landscape	2	R2 700	1,244	Yes
8	Goulburn West - Run'O'Waters (59 Foord Rd)	18.6	RU6 Transition	2	R2 700	213	Yes
9	Run'O'Waters (Carr St, Ducks Lane)	11.79	E4 Env Management B6 Ent Corridor	2 0	LSZ 2 Ha	0	No – acts at buffer to B6
10	Goulburn West (32 Bishopthorpe Lane)	21.50	RU6 Transition	10	R5 Large Lot Residential 2,000 MLS	86	Yes
11	Goulburn South (Brisbane Grove Area - 'Winfarthing' Brisbane Grove, 'Alfarthing' Braidwood Roads, Johnsons Lane)	52.43	RU6 Transition	10	R5 Large Lot Residential	0	No
12	Goulburn North (515 Crookwell Road)	165.91	E3 Env Management	100	RU6 Transition 100ha	0	Yes*

Site	Location	Area (ha)	Current Zone	Current Lot Size (ha)	Requested Zone/MLS	Expected Lot Yield	Supported?
13	Goulburn (3 Garroorigang Road 'South Hill')	32.40	RU2 Rural Landscape	100	None/no submission details	0	No
14	Marys Mount (Progress Street & Middle Arm Road)	7.59	R2 Low Density Residential	700m2	None/no submission details, capacity of 87 lots unchanged	0 new	Yes
15,16, 18	REFER MARULAN						
17	Run'O'Waters (235 Gurrundah Road 'Wollonhill')	89.61	RU6 Transition	10	R5 Large Lot Residential 20,000 MLS	36	No
19	Goulburn West (Corner of Carr St & Ducks Lane)	9.47	E4 Environmental Management	20ha	No rezoning required, capacity of 38 lots unchanged	0 new	Yes
20	Goulburn South (Garroorigan, Brisbane Grove & 'Winfarthing' 71 Braidwood Road)	76.32	RU1 Primary Production	100	RU6 10 MLS	0	No
21	Goulburn (745 Crookwell Road)	28.82	E3 Environmental Management	100		0	No
22	Goulburn 70 Gurrundah Road	10.14	RU6 Transition	10	R5 Large Lot Residential 2,000 MLS	41	No
23	Goulburn East (Rocky Hill - former High Street Subdivision)	9.61	RE1 Public Recreation	0	R2 Low Density Residential 700 MLS	110	No
24	Craigs Hill - Goulburn North (Middle Arm Road)	52.46	R2 Low Density Residential E3 Env Management	700 100	R2 Low Density Residential 700 MLS	600	Yes
25	Gundry: 15 Mountain Ash Road, 35 Mountain Ash, 101 Mountain Ash, 109 Mountain Ash, 148 Mountain Ash, 188 Mountain Ash, 206 Mountain Ash, 274 Mountain Ash, 4 Barretts Lane	233.60	RU1 Primary Production	100		0	No
26	Mistful Park, Crookwell Road	96.78	E4 Environmental Living	10	R2 Low Density Residential 700 MLS	1,106	Yes
27	Goulburn 22-28 Gorman Street	4.52	RU6 Transition	10	<i>Wants subdivision</i>	0	No
28	Kingsdale 56 Onslow Road	10.07	E3 Env Management	100	<i>Interested landowner</i>	0	No
29	Goulburn 191 Chinamans Lane	11.41	E3 Env Management	100	RU6 Transition 10	1	No
34	Goulburn (Long Street – Sydney Road)	3.09	B6 Enterprise Corridor	LSZ Nil	R1 General Residential	0	No – not contiguous

Site	Location	Area (ha)	Current Zone	Current Lot Size (ha)	Requested Zone/MLS	Expected Lot Yield	Supported?
			Aged Care Facility				
35	Goulburn (16 Nicole Place)	1.71	E4 Environmental Living R5 Large Lot Residential	2,000	R5 2,000 MLS	7	No
36	Goulburn (31-33 Goldsmith Street)	810	B3 Commercial Core Conservation Area	0	Mixed Use with Residential Accommodation above.	0	Yes
37	Run'O'Water (189 Gurrundah Road)	10.16	RU6 Transition	10	2ha	4	No – not contiguous/con strained
38	Towrang (17699 Hume Highway)	360.60	RU6 Transition	10	R5 Large Lot Residential 2,000 MLS	0	No
39	634 Taralga Road Lot 1 and Lot 2 DP 21003261 Inc Cemetery and Kenmore	510	SP2 Infrastructure	NA	Various Subject to Site Assessment for Large Lot Residential 2ha MLS on Traralga Road, subdivision of biobank site, disposal and leasing of surplus land (report 12.4 7/11/18)	TBD	Yes

Marulan Opportunity Sites

Site	Location	Area (ha)	Current Zone	Current Lot Size (ha)	Zone and MLS	Expected Lot Yield	Supported
15	Marulan Central (Corner of George Street and Portland Avenue)	7.3	IN1 General Industrial	0	R1 700 MLS	83	Yes
16	Marulan East (152 Medway Road)	29.2	RU2 Rural Landscape	100	Tourist, employment and residential use of land	0	No
18	Marulan North (437 Brayton Road)	21.5	RU2 Rural Landscape	100	RU6 1,000,000 MLS	0	No
30	Marulan (218 Brayton Road)	50.11	RU6 Transition	100	R5 2,000 MLS	200	Yes
31	Marulan (131-139 George Street)	8,030m ²	B2 Local Centre	0	RU5 Village or R5 Large Lot Residential	0	Yes
32	Marulan (16037 Hume Hwy)	40.2	RU2 Rural Landscape	10	Permit residential development	0	No
33	Marulan (413 Brayton Road)	548,949	RU6 Transition	1,000,000	R5 2,000 MLS	220	Yes

2 Site Assessment

Sites were assessed using criteria identified in the Housing Strategy. These included development principles for both urban and non-urban land as well as environmental and physical constraints analysis. The various criteria are as follows:

2.1 Objectives and Principles for identifying land

Consideration has been given to objectives and principles consistent with the strategic and statutory context of each settlement including the proximity to the city or town centre, the rail station, the Hume Highway as a physical constraint, compatibility of surrounding zones and land uses (particularly in the southern areas around Goulburn).

These criteria were used to inform the focus and consideration of land suitable for urban expansion as part of the Housing Strategy.

2.1.1 Criteria of identification of greenfield sites

Location

- » the site is within the area identified for urban expansion in the Housing Strategy adopted by Council
- » the site location supports a logical and contiguous development with the existing settlements of Goulburn and Marulan.
- » the site is within the urban fringe identified by the Housing Strategy
- » the site can be connected to water and sewer infrastructure
- » the site has minimal or limited impact on matters of biodiversity or heritage
- » the site will not result in the fragmentation of biodiversity corridors
- » the sites is not identified as bring subject to flooding
- » the proposal will preserve and enhance riparian corridors as open space networks and utilise for active travel connections. Development around riparian corridors is to be in accordance with the guidelines for waterfront land defined by the NSW Office of Water DPI
- » avoid residential development on the southern/eastern side of the Hume Highway
- » the proposal will satisfy the requirements of rural planning and subdivision principles (Rural Lands SEPP).

Housing

- » housing contributes the required demand identified in the Housing Strategy for the Goulburn Mulwaree LGA
- » the proposal delivers appropriate housing to meet the demographic needs of the region
- » development reinforces and enhances any existing residential character
- » development will contribute housing affordability, choice and diversity appropriate for the anticipated demographic profile of the LGA.

Use

- » development will not result in land use conflicts particularly with agriculture and primary industries
- » minimise disturbance or conflict with State Significant Quarry Areas.

2.1.2 Additional Criteria for Large Lot Residential Land

In addition to addressing the Rural Lands SEPP, Ministerial Directions and information required to be provided in a Planning Proposal as set out by the Department of Planning and Environment in the Guideline to Preparing Planning Proposals, the following criteria must be applied for identification of Rural Residential Development with a two to 10 hectare minimum.

- » The development can be managed to avoid land use conflict Rural residential development should have regard to the surrounding agricultural land use and must provide a buffer to agricultural land.
- » The site is unconstrained by flooding, as it is above the flood planning level of the 1 in 100 ARI The area is not affected by flooding and has unconstrained flood free access out of the property and/or locality.
- » The lots can be connected to the existing road network by sealed road access The area can be connected to the existing sealed road network by sealed road access and is fully serviced by a sealed road.
- » The development will not undermine future residential land opportunities. It should be located on land that is not, or unlikely to be suitable for general residential land at some point in the future.
- » The resulting residential development will not adversely impact on the groundwater system. Any development, and in particular un-serviced development, needs to demonstrate that it will not adversely impact on the groundwater system.
- » The need for the additional lots can be justified in terms of supply and demand
- » The site be managed to reduce bushfire hazard
- » The development should avoid class I-III agricultural land and avoid Important Agricultural Land (subject to mapping being completed for the LGA)
- » The development will have access to a sustainable water supply. The proposed lot must demonstrate the provision of a sustainable water supply. A sustainable water supply can be achieved by various means including the provision of reticulated water, roof water catchment or accessing water from a river, lake or aquifer in accordance with the Water Management Act 2000. Department of Primary Industries – Water 'How much water do I need for my rural property' provides one methodology to calculate a required supply.

3 Environmental Constraints and Land Suitability

A number of environmental constraints that impact on subdivision for residential development were identified and mapped. These are discussed in the Housing Strategy.

Environmental and physical constraints analysis was undertaken using a GIS with data sourced from Goulburn Mulwaree Council to identify high level constraints in the context of the Strategy area, include the 38 sites.

The constraints that may impact on the orderly release of land for urban development are discussed briefly below. Constraints Maps were compiled for each of the 38 sites. The constraints mapping is included below and include (where relevant)

- » Topography
- » Flood Prone Land
- » Bushfire Prone Land
- » Biodiversity
- » Agricultural Land
- » Sydney Water Catchment
- » Land Suitability

In addition to the environmental constraints listed above, Ecological Australia were engaged to provide a specific assessment as to the biodiversity conservation value of the sites. Ecological classified the conservation value as high, medium or low. The conservation value mapping is should in Figures 3 and 4 as follows and the Ecological Australia Report is Attachment 1 (Note that Site 39 has not been subject to detailed assessment by Ecological Australia at this stage).

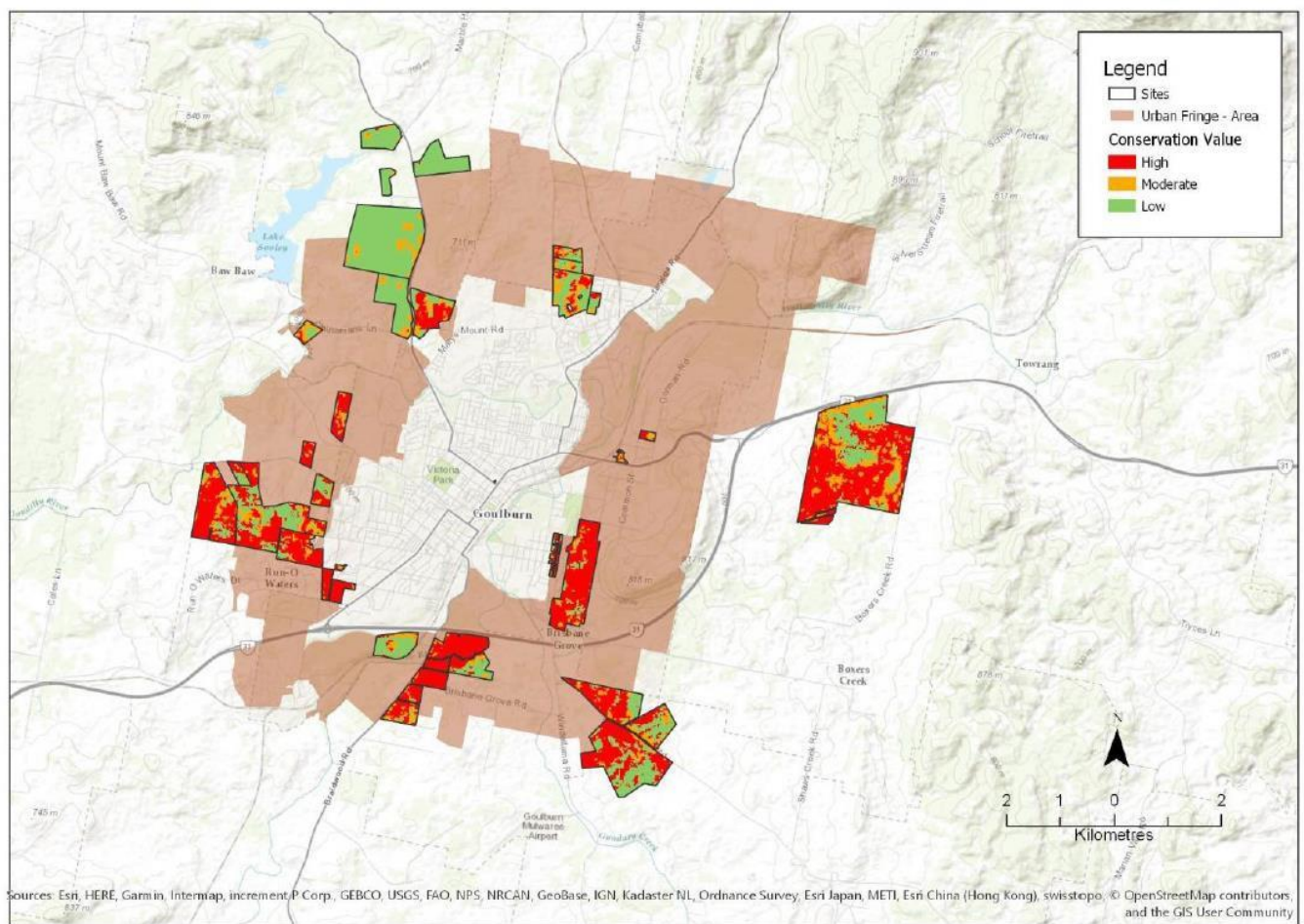
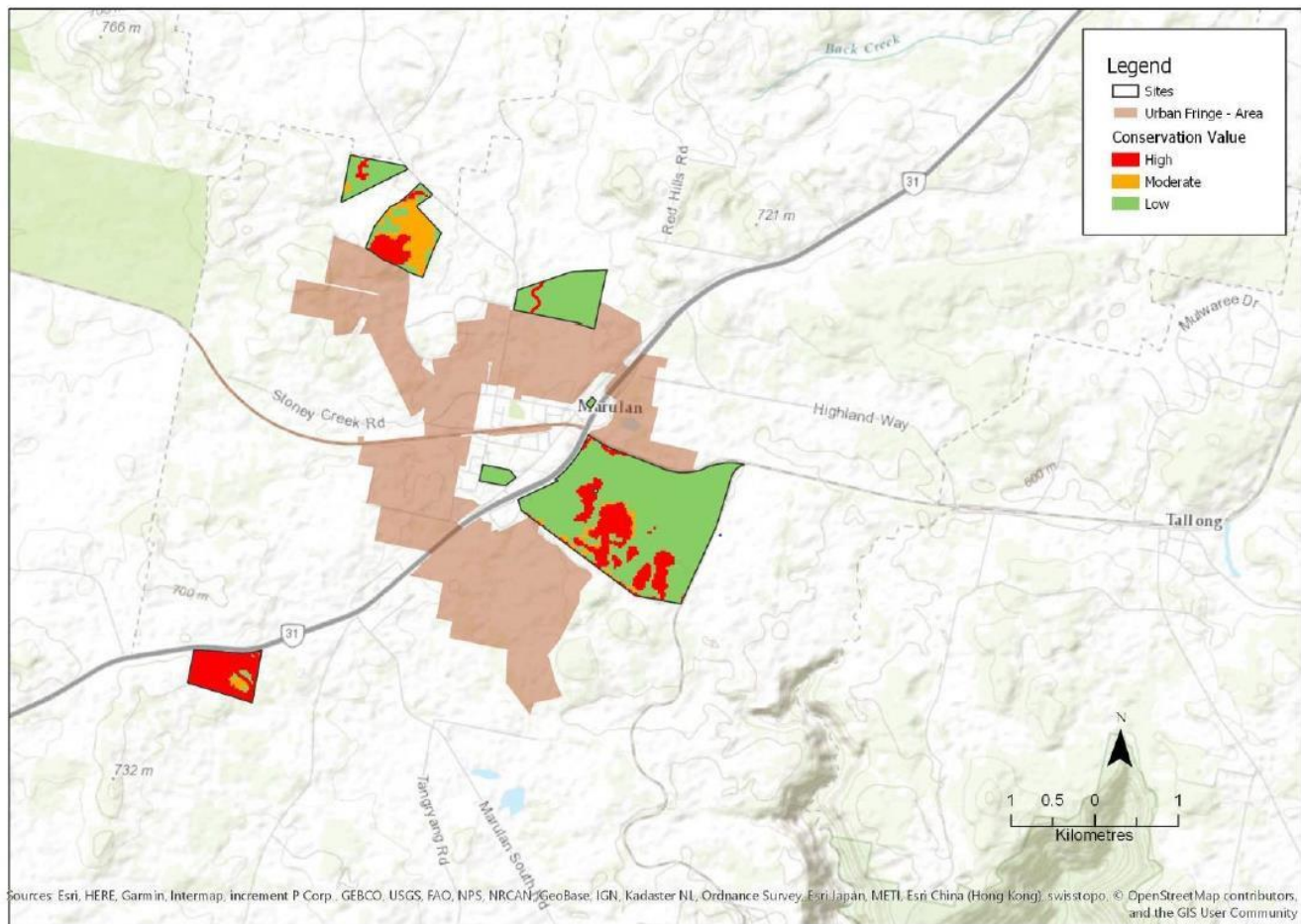
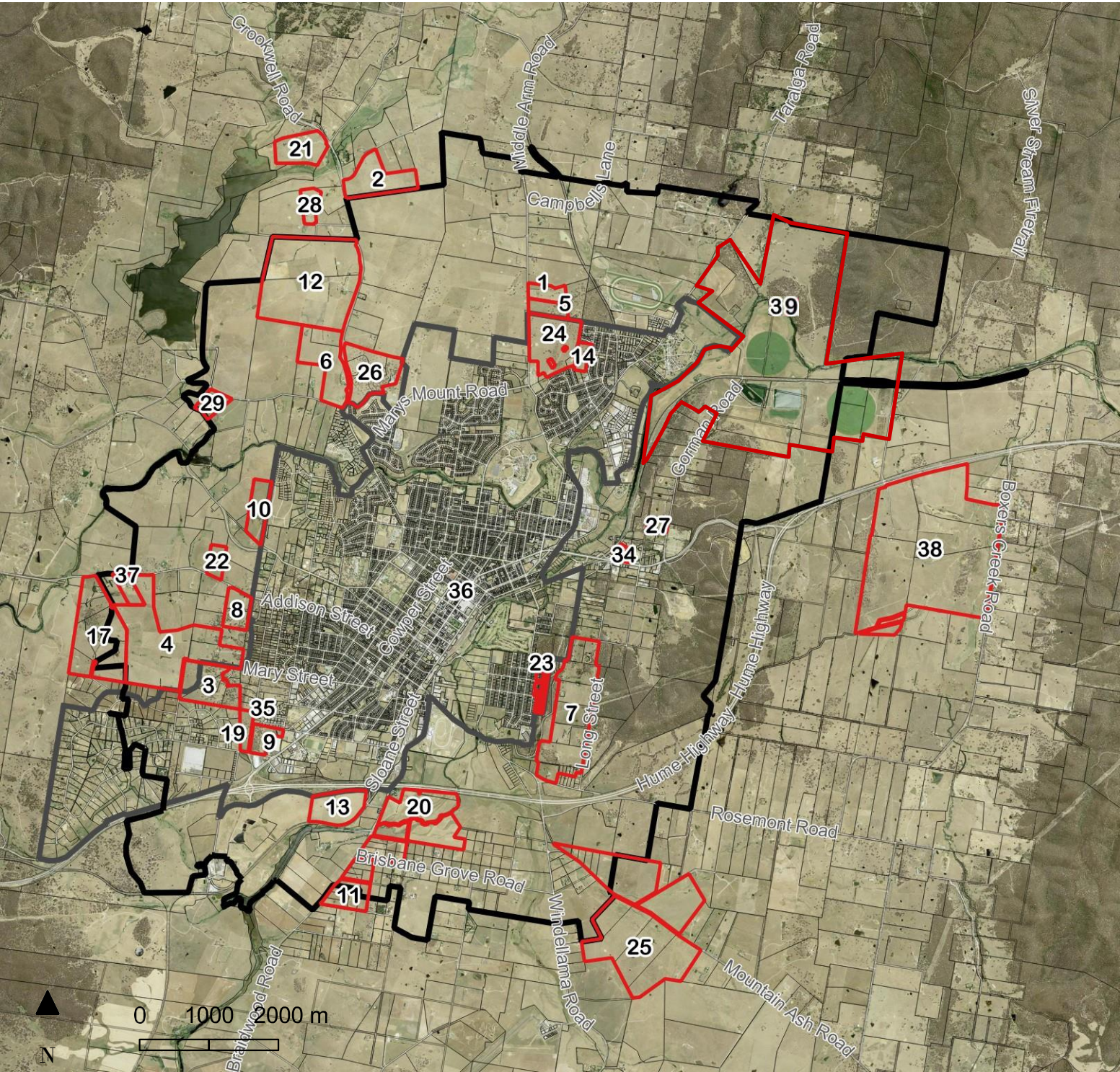
Figure 3 Goulburn Conservation Values

Figure 4 Marulan Conservation Values



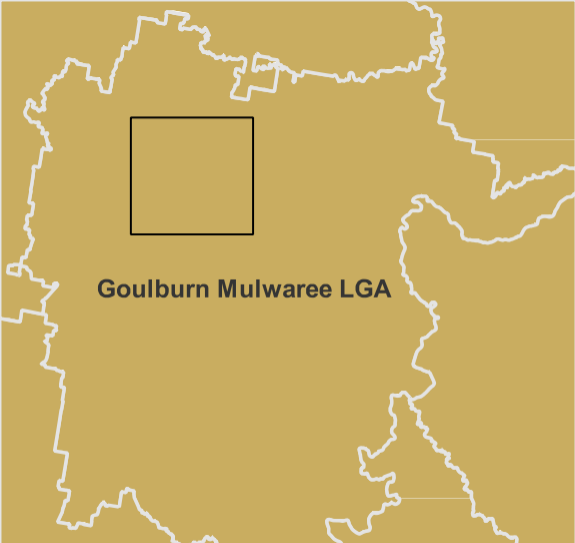
4 Constraints Mapping

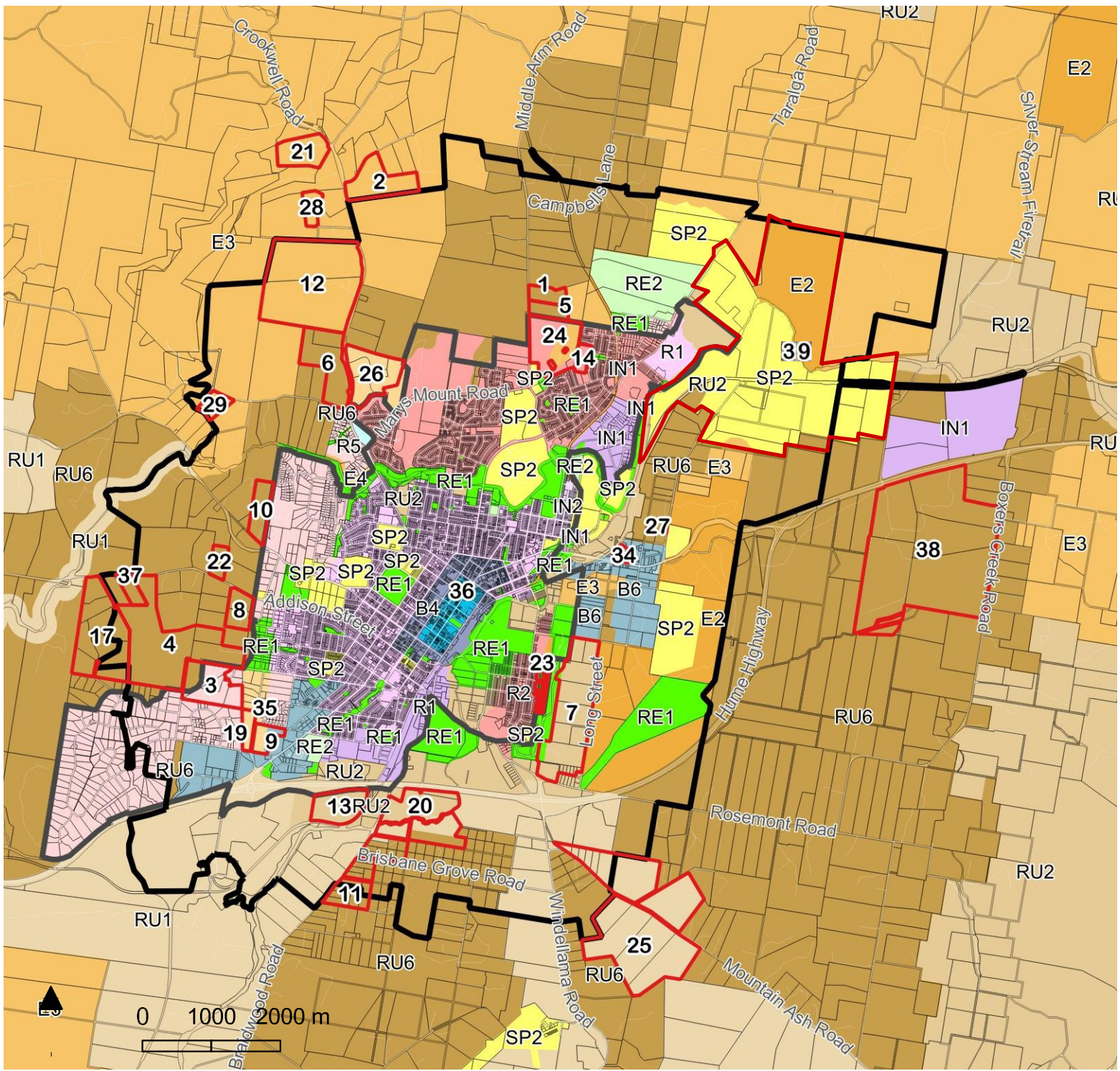


KEY SITES MAP

Legend

- Sites
- Urban area
- Urban fringe





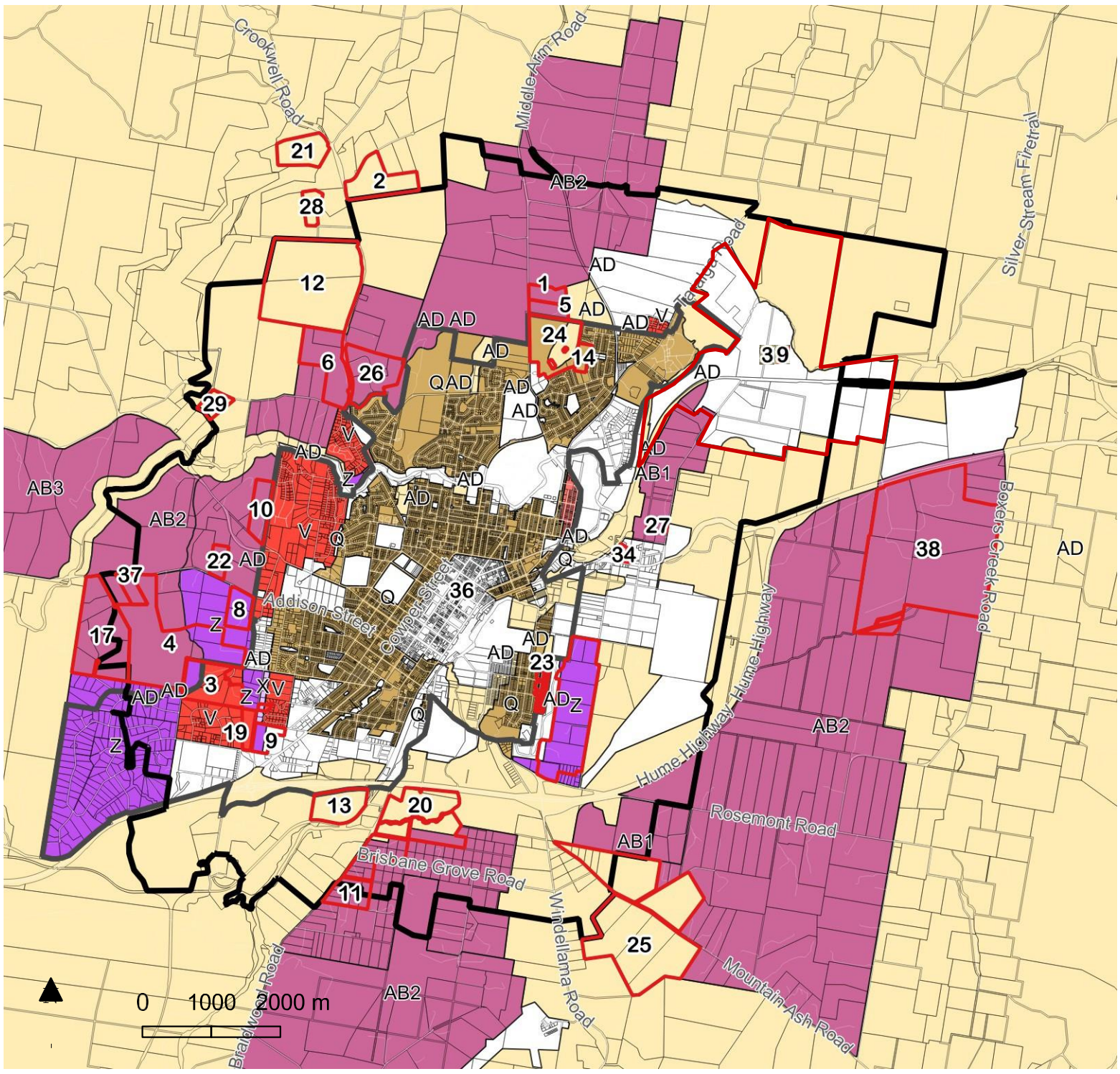
Land Zoning Map

Legend

- Urban area
- Urban fringe

Land zoning

- B1 - Neighbourhood Centre
- B3 - Commercial Core
- B4 - Mixed Use
- B6 - Enterprise Corridor
- E2 - Environmental Conservation
- E3 - Environmental Management
- E4 - Environmental Living
- IN1 - General Industrial
- IN2 - Light Industrial
- R1 - General Residential
- R2 - Low Density Residential
- R5 - Large Lot Residential
- RE1 - Public Recreation
- RE2 - Rural Landscape
- RU1 - Primary Production
- RU2 - Rural Landscape
- RU6 - Transition
- SP2 - Infrastructure



Lot Size Map

Legend


- Sites
- Urban area
- Urban fringe
- Minimum lot size
 - Q - 700 M2
 - V - 2000 M2
 - X - 8000 M2
 - AB1 - 10 ha
 - AB2 - 20 ha
 - AB3 - 40 ha
 - AD - 100 ha


Constraints Biodiversity & Flooding Map

Legend

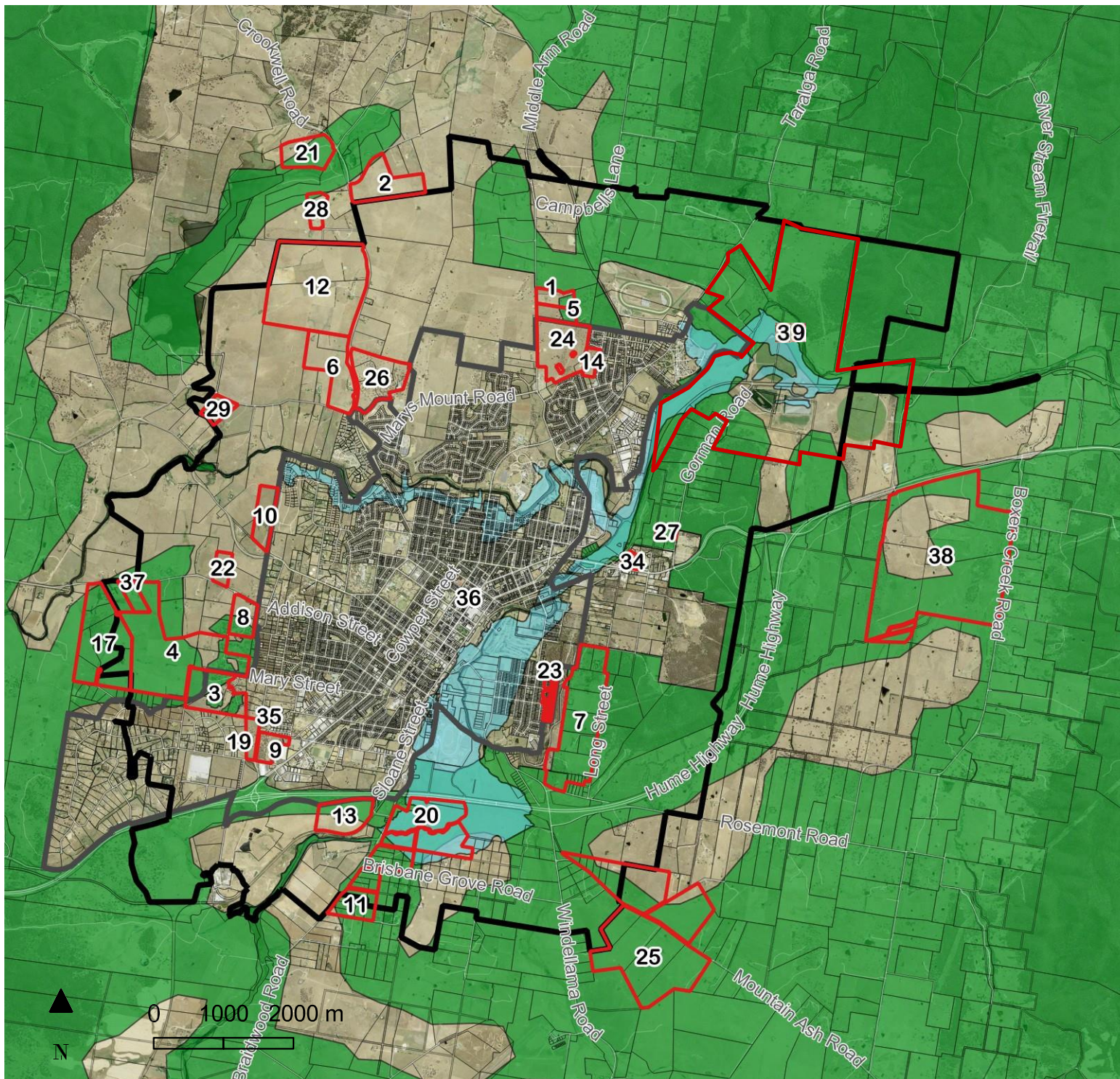
 Sites

 Urban area

 Urban fringe

 Flooding

 Biodiversity




Infrastructure Water & Sewer Map

Legend

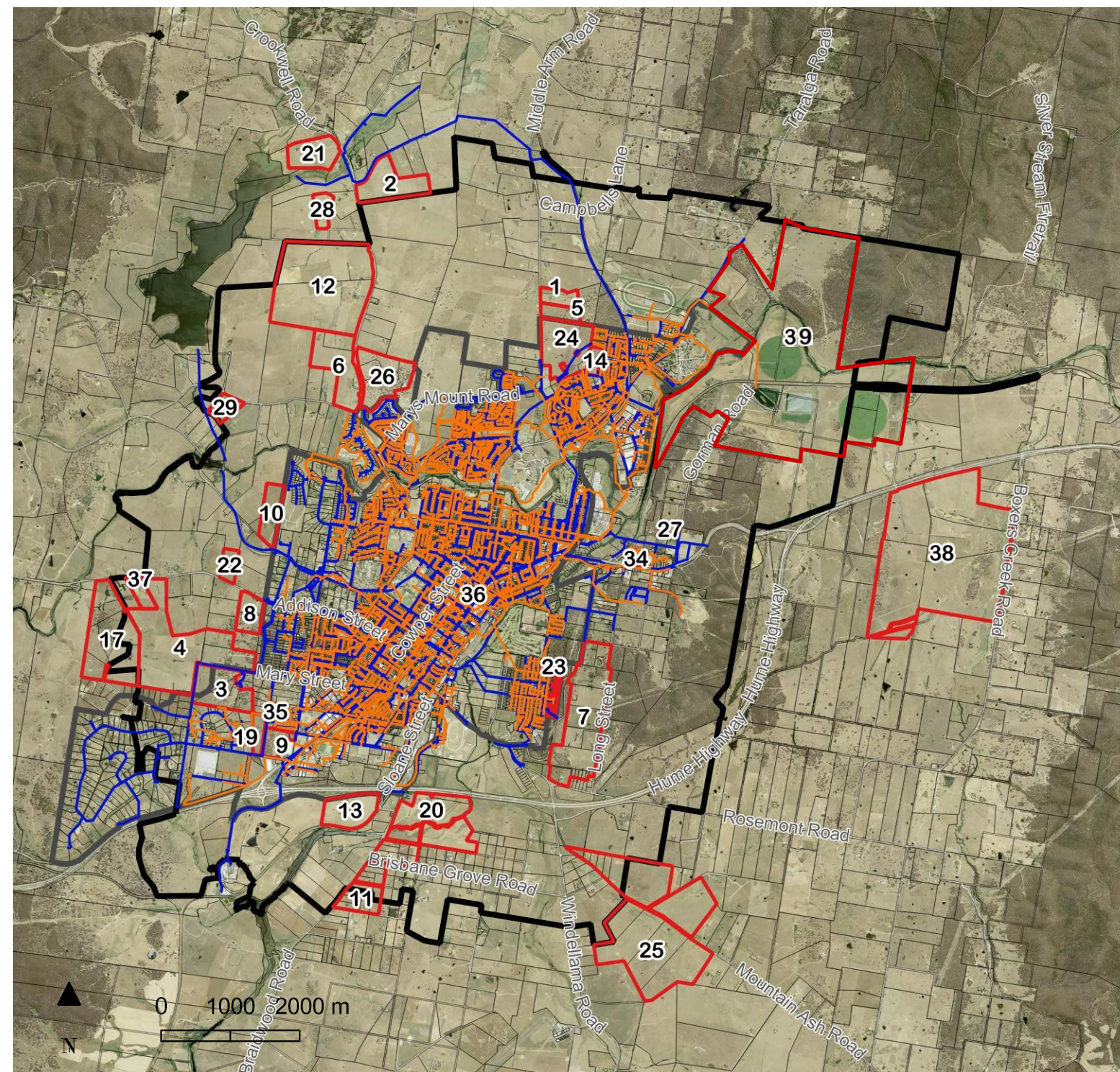
 Sites

 Urban area

 Urban fringe

 Water network

 Sewerred network



Constraints


Slope Map


Legend

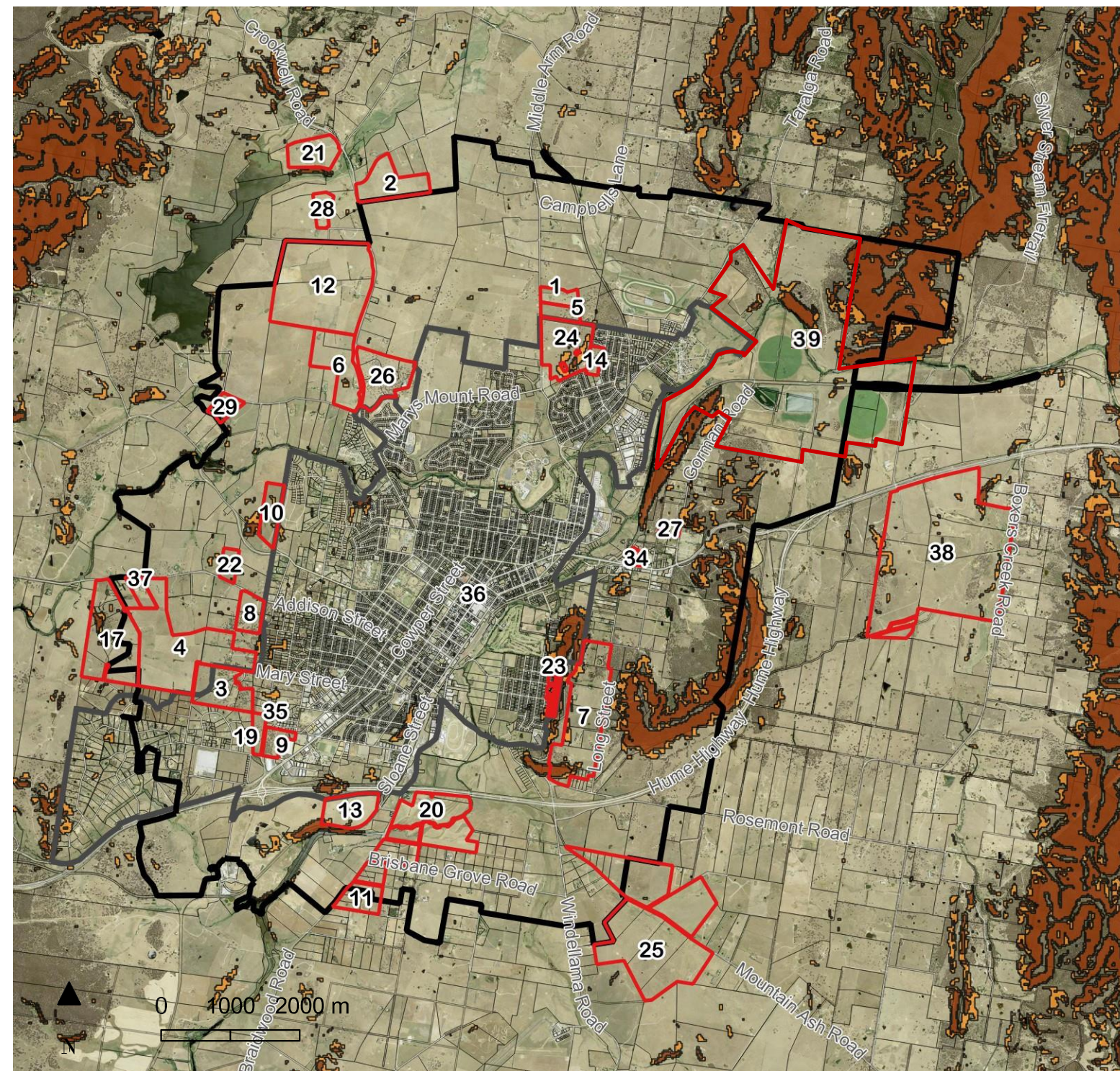
 Sites

 Urban area

 Urban fringe

 15 - 20 % Slope

 > 20 % Slope



Constraints

Vegetation Communities Map

Legend


 Sites


 Box-Gum Woodland


 Dry Forest


 Grassland-Woodland Mosaic

 Heathland-Shrubland-Herbfield-Rock

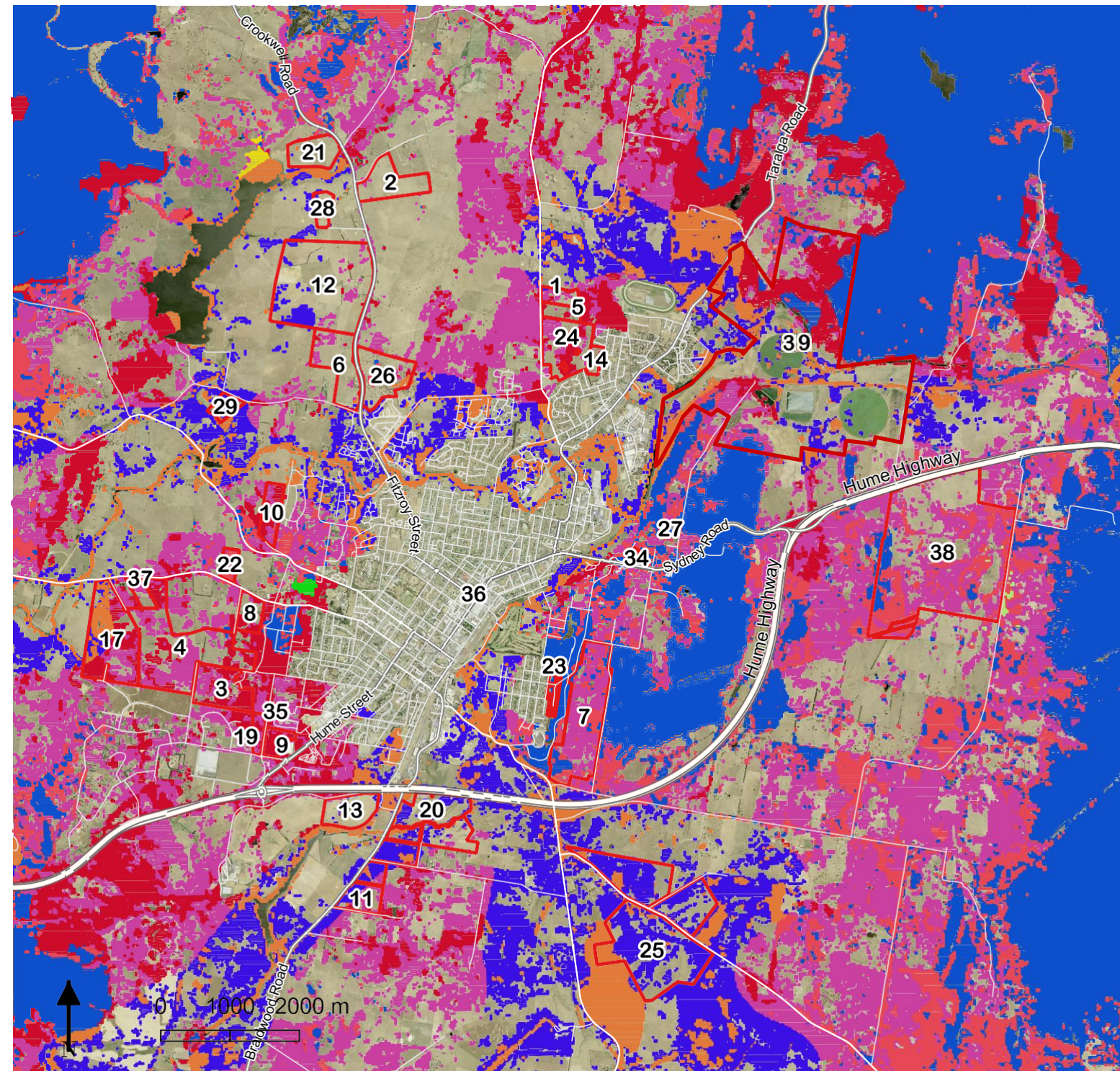
 Native Grassland (higher probability of occurrence)

 Native Grassland (lower probability of occurrence)

 Secondary Grassland (higher probability of occurrence)








 Secondary Grassland (lower probability of occurrence)

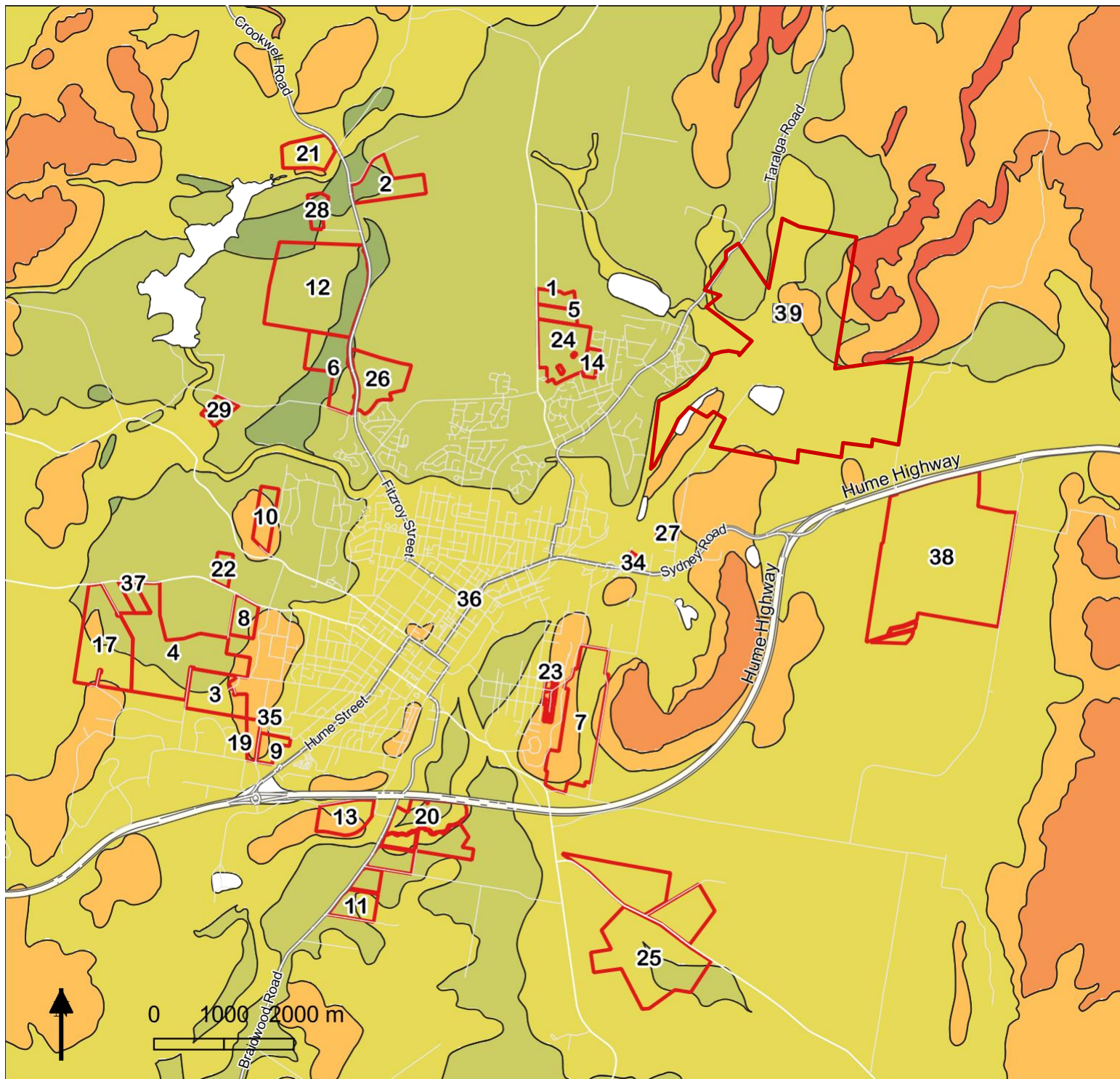
 Wet Forest

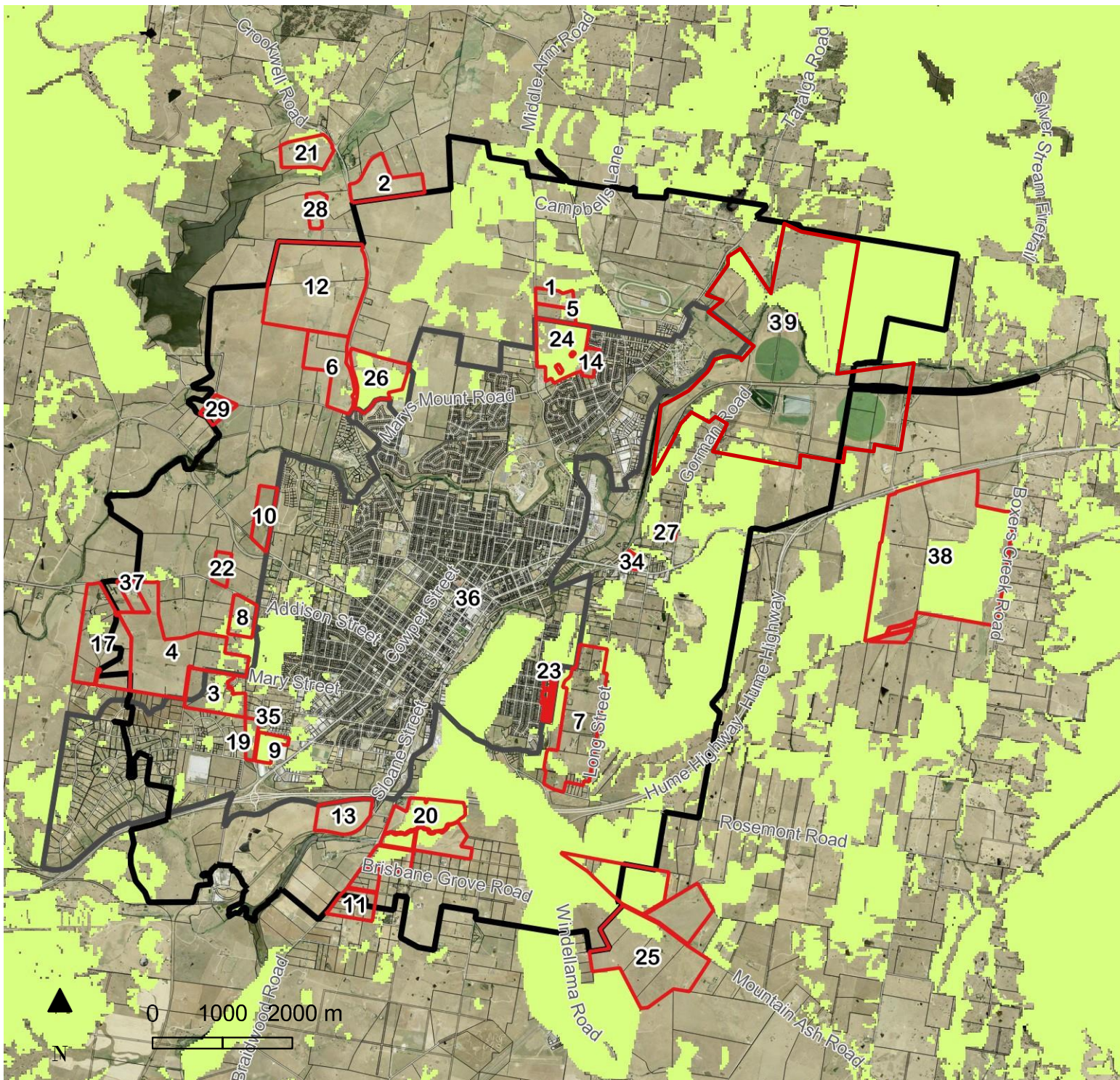


Constraints Soil Map

Legend





-  Sites
-  Moderate limitations
-  Moderate to severe limitations
-  Severe limitations
-  Very severe limitations
-  Extremely severe limitations
-  Extreme limitations

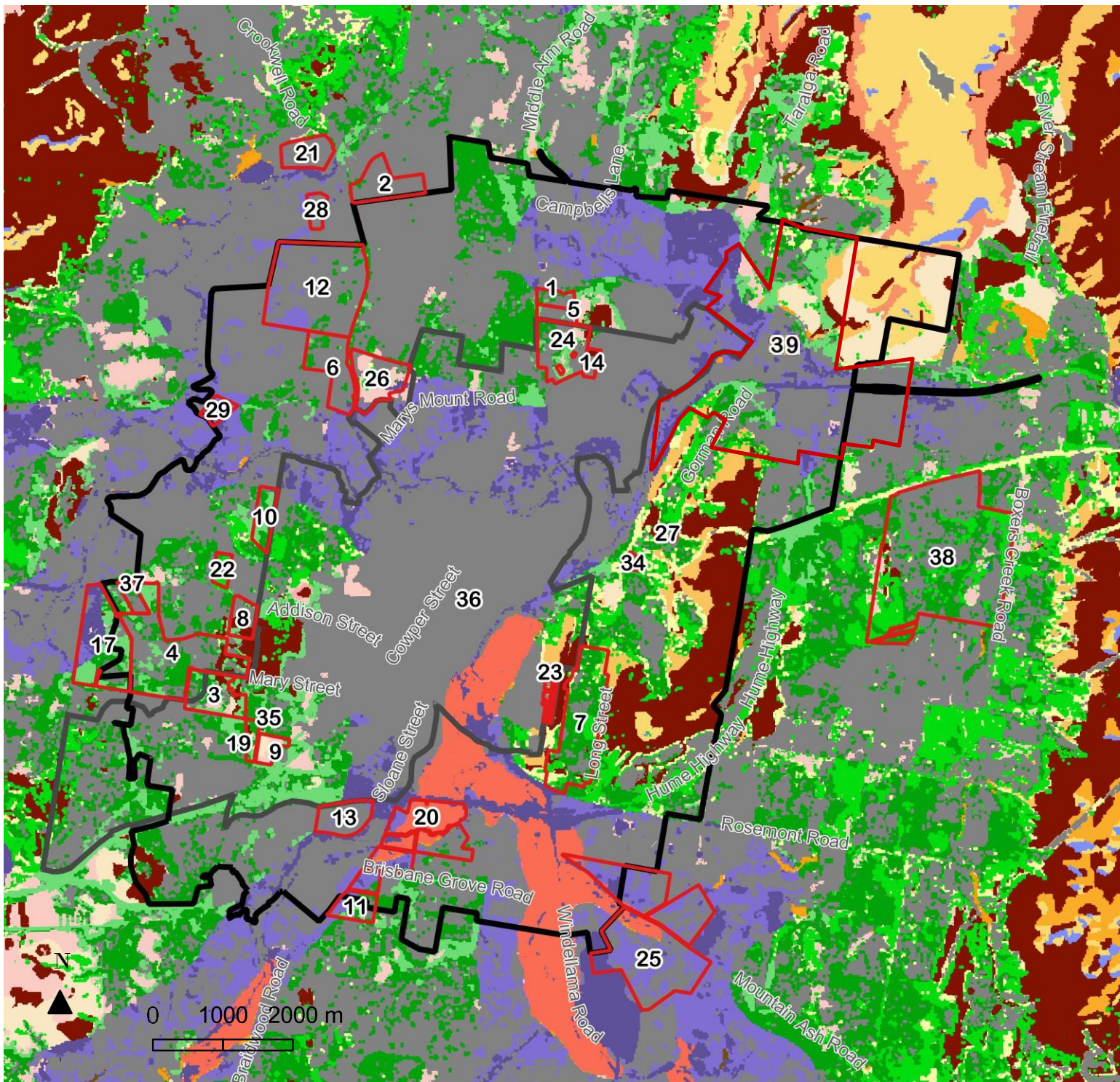




High Environmental Value Map

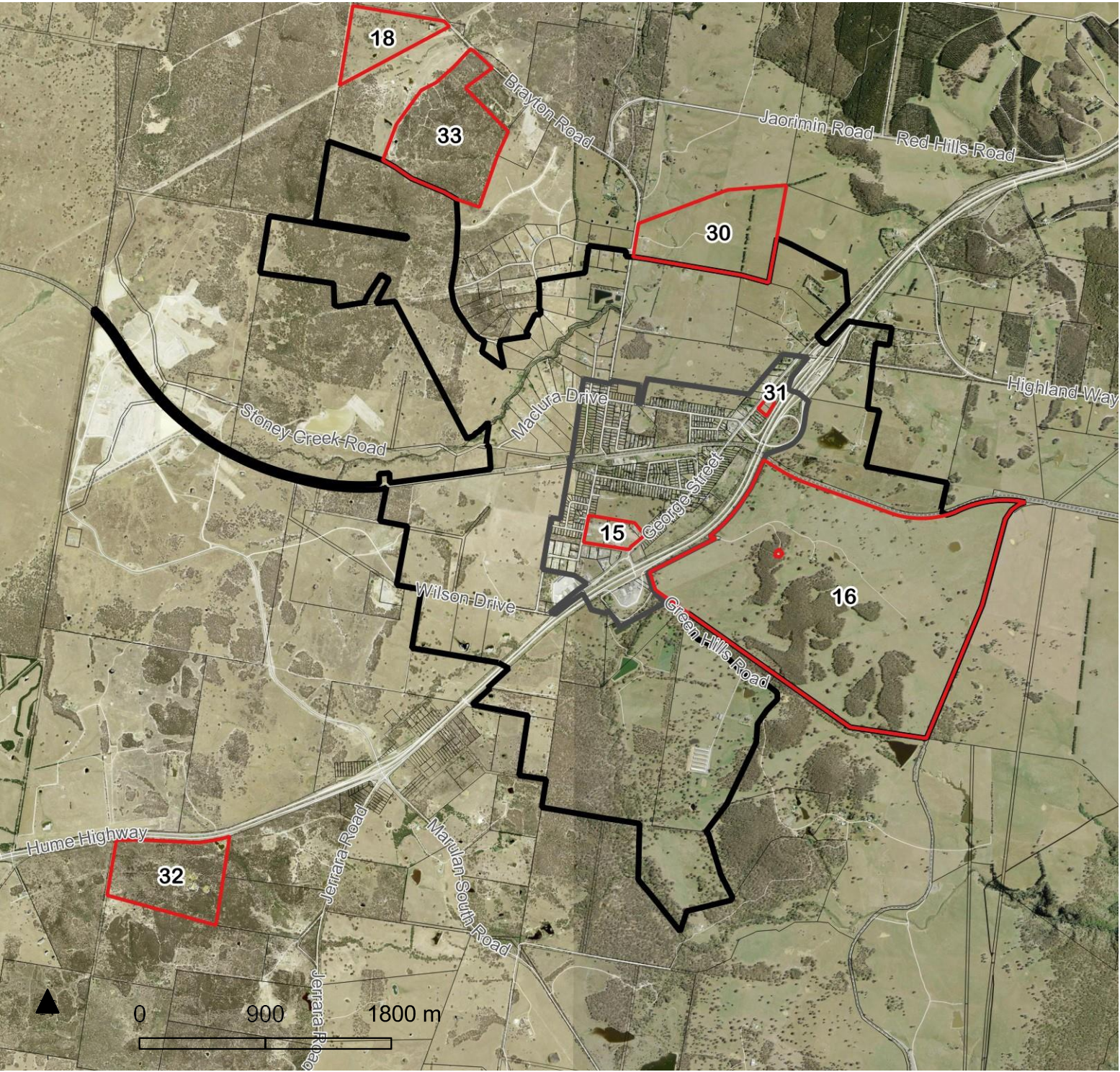
Legend

-  Sites
-  Urban area
-  Urban fringe
-  HEV South East and Tablelands



Vegetation Communities Map

- Sites
- Urban area
- Urban fringe
- None
- Box-Gum Woodland
- Dry Forest
- Grassland-Woodland Mosaic
- Heathland-Shrubland-Herbfield-Rock
- Native Grassland (higher probability of occurrence)
- Native Grassland (lower probability of occurrence)
- Secondary Grassland (higher probability of occurrence)
- Secondary Grassland (lower probability of occurrence)
- Wet Forest
- Bungonia Slates Woodland
- Cool Montane Wet Forest
- Eastern Tablelands Dry Forest
- Elevated Gorge Forest
- Highland Range Sheltered Forest
- Shoalhaven Riparian Scrub
- Tableland Flats Grassland
- Tableland Grassy Box-Gum Woodland
- Tableland Hills Grassy Woodland
- Tableland Low Woodland
- Tableland Ridge Forest
- Tableland Swamp Flats Forest
- Tableland Swamp Meadow
- Western Tablelands Dry Forest



Key Sites Map

Legend

- Sites
- Urban area
- Urban fringe



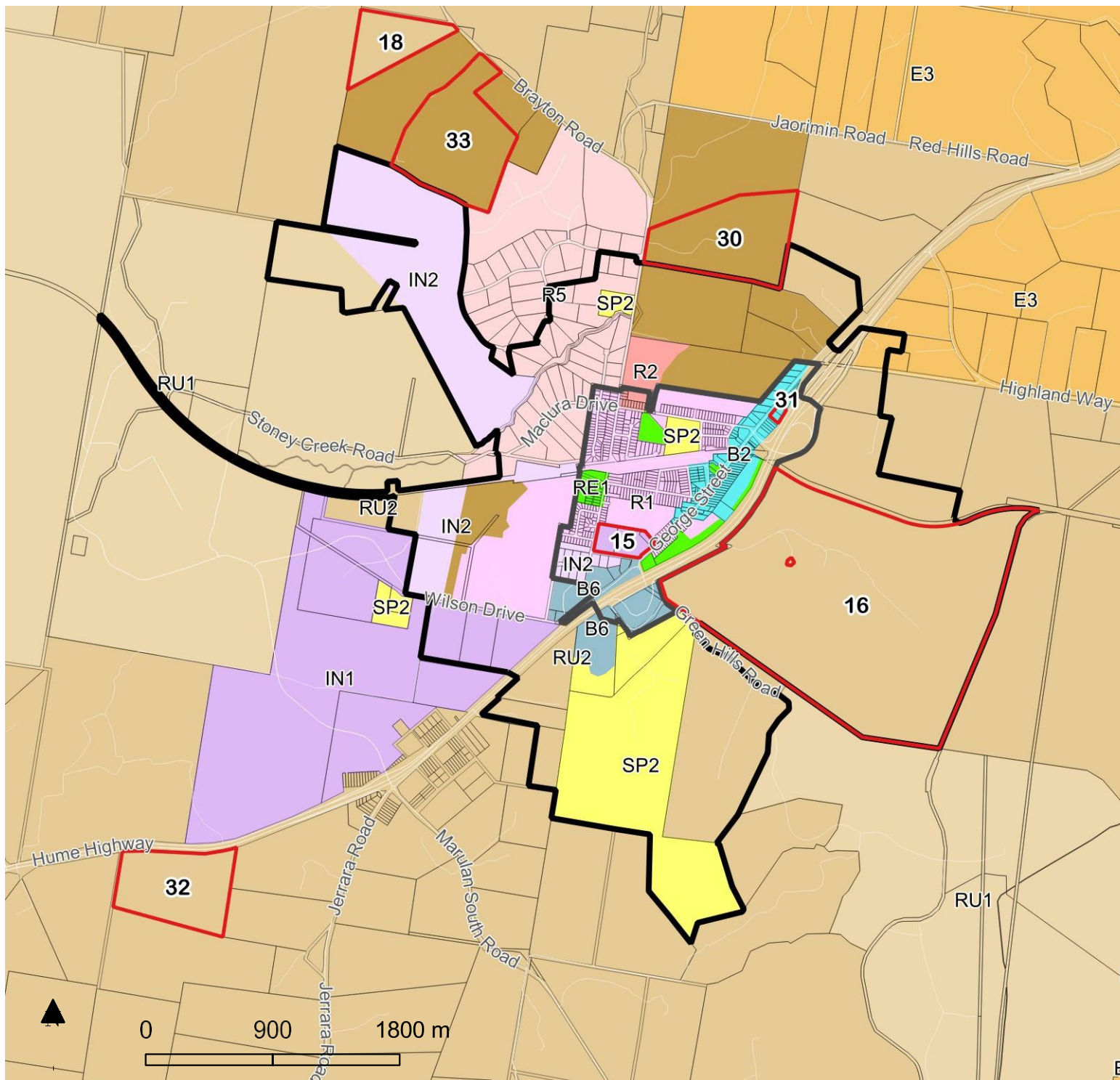
Land Zoning Map

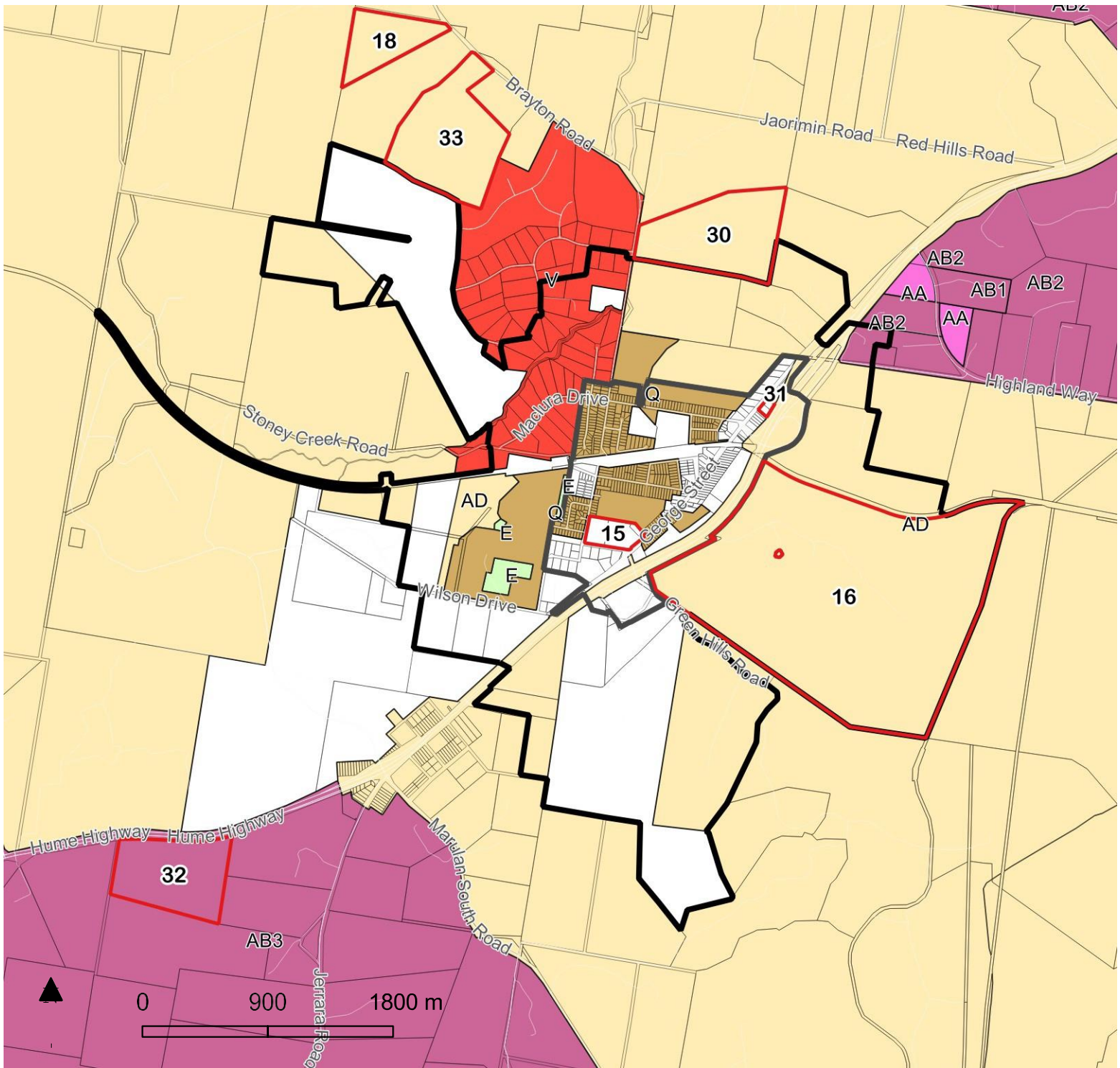
Legend

- Urban area
- Urban fringe

Land zoning

- B2 - Local Centre
- B6 - Enterprise Corridor
- E3 - Environmental Management
- IN1 - General Industrial
- IN2 - Light Industrial
- R1 - General Residential
- R2 - Low Density Residential
- R5 - Large Lot Residential
- RE1 - Public Recreation
- RU1 - Primary Production
- RU2 - Rural Landscape
- RU6 - Transition
- SP2 - Infrastructure

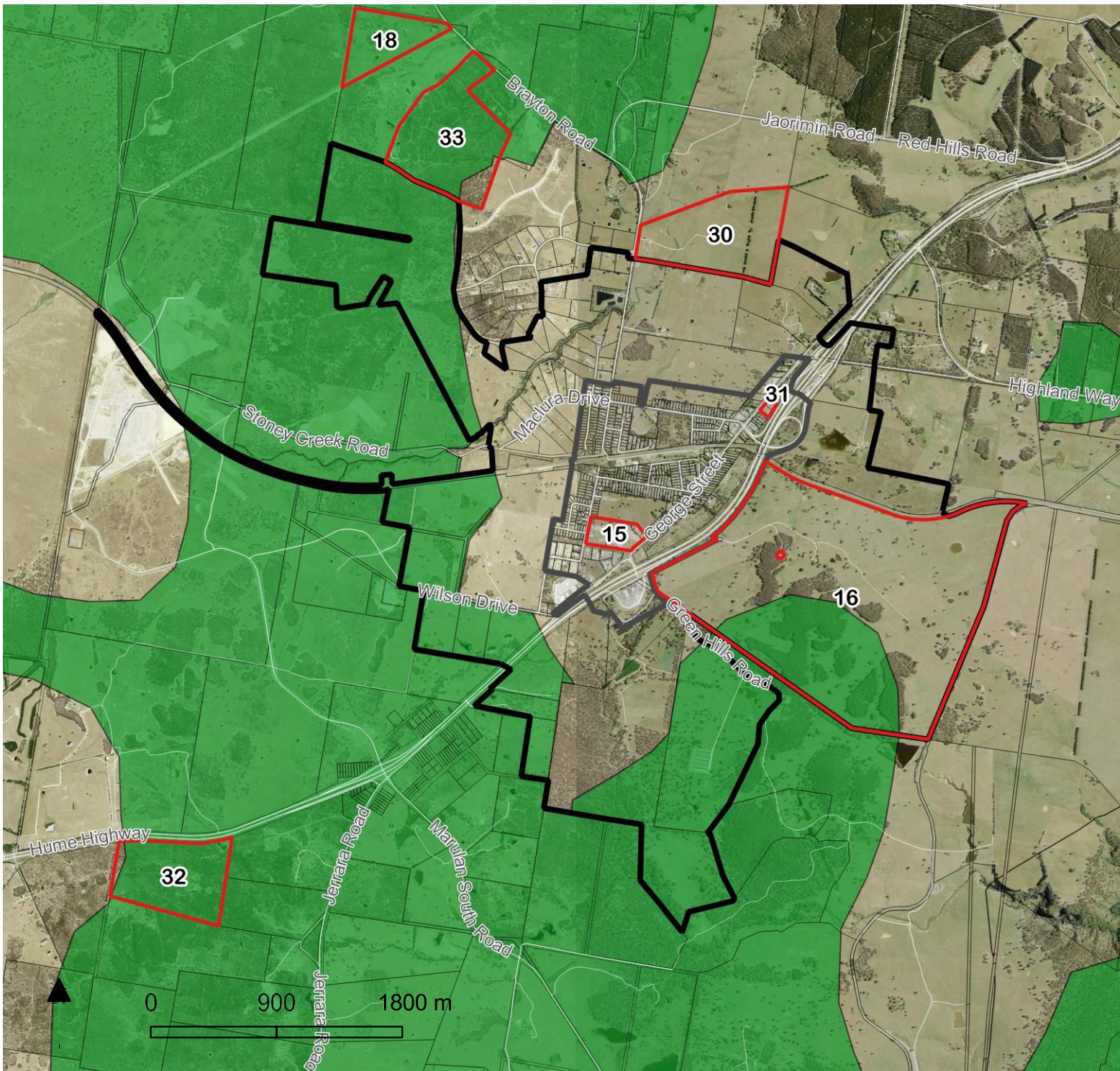




Lot Size Map





Legend

- Sites
- Urban area
- Urban fringe
- Minimum lot size
- E - 350 M2
- Q - 700 M2
- V - 2000 M2
- AA - 5 ha
- AB1 - 10 ha
- AB2 - 20 ha
- AB3 - 40 ha
- AD - 100 ha



Constraints Biodiversity Map

Legend


-  Sites
-  Urban area
-  Urban fringe
-  Biodiversity

Infrastructure Water & Sewer Map

Legend

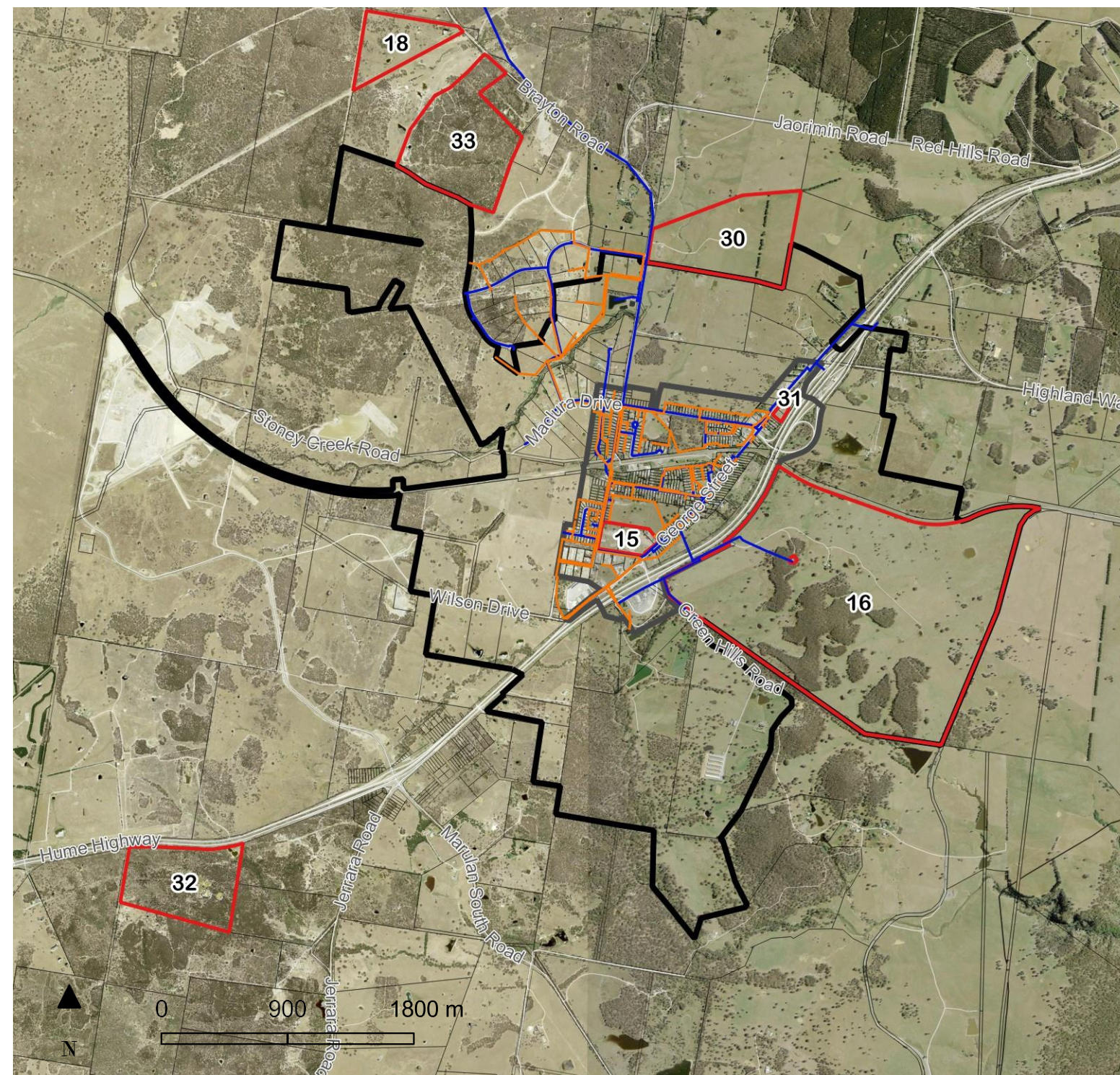
 Sites

 Urban area

 Urban fringe

 Water network

 Sewerred network





Constraints Slope Map


Legend

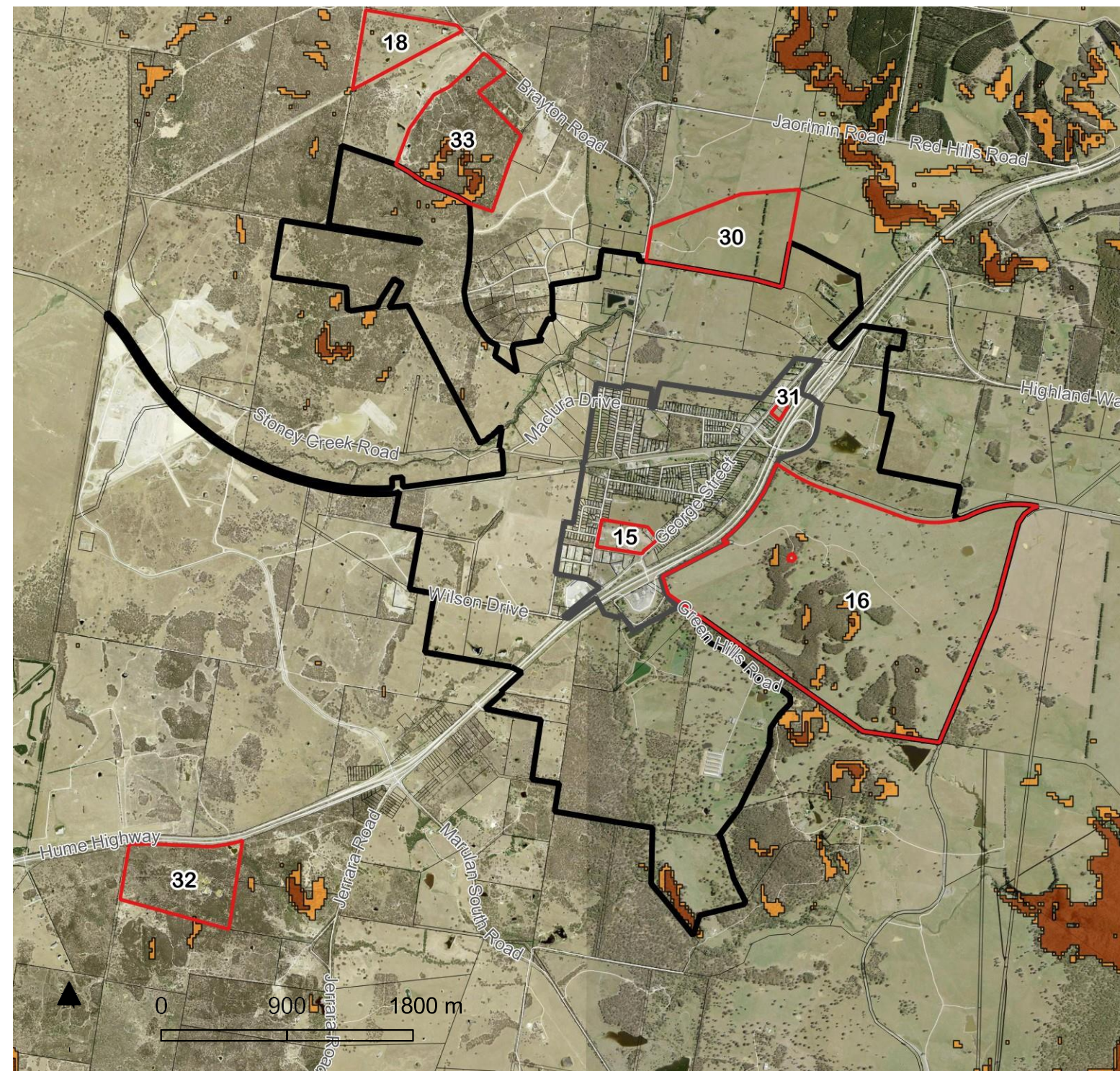
 Sites

 Urban area

 Urban fringe

 15 - 20 % Slope

 > 20 % Slope



Constraints

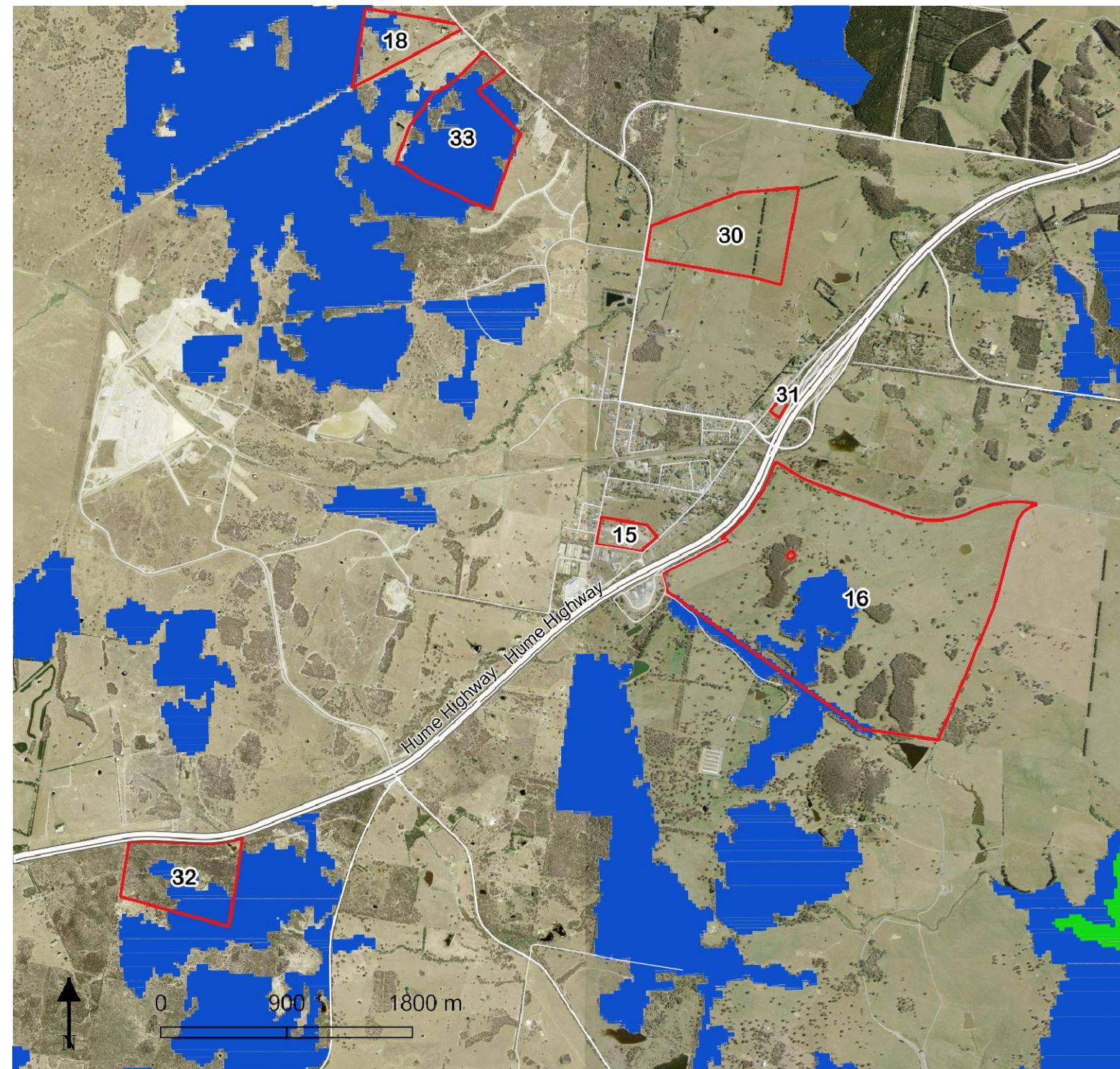
Vegetation Communities Map

Legend

 Sites

 Box-Gum Woodland


 Dry Forest



Constraints Soil Map

Legend

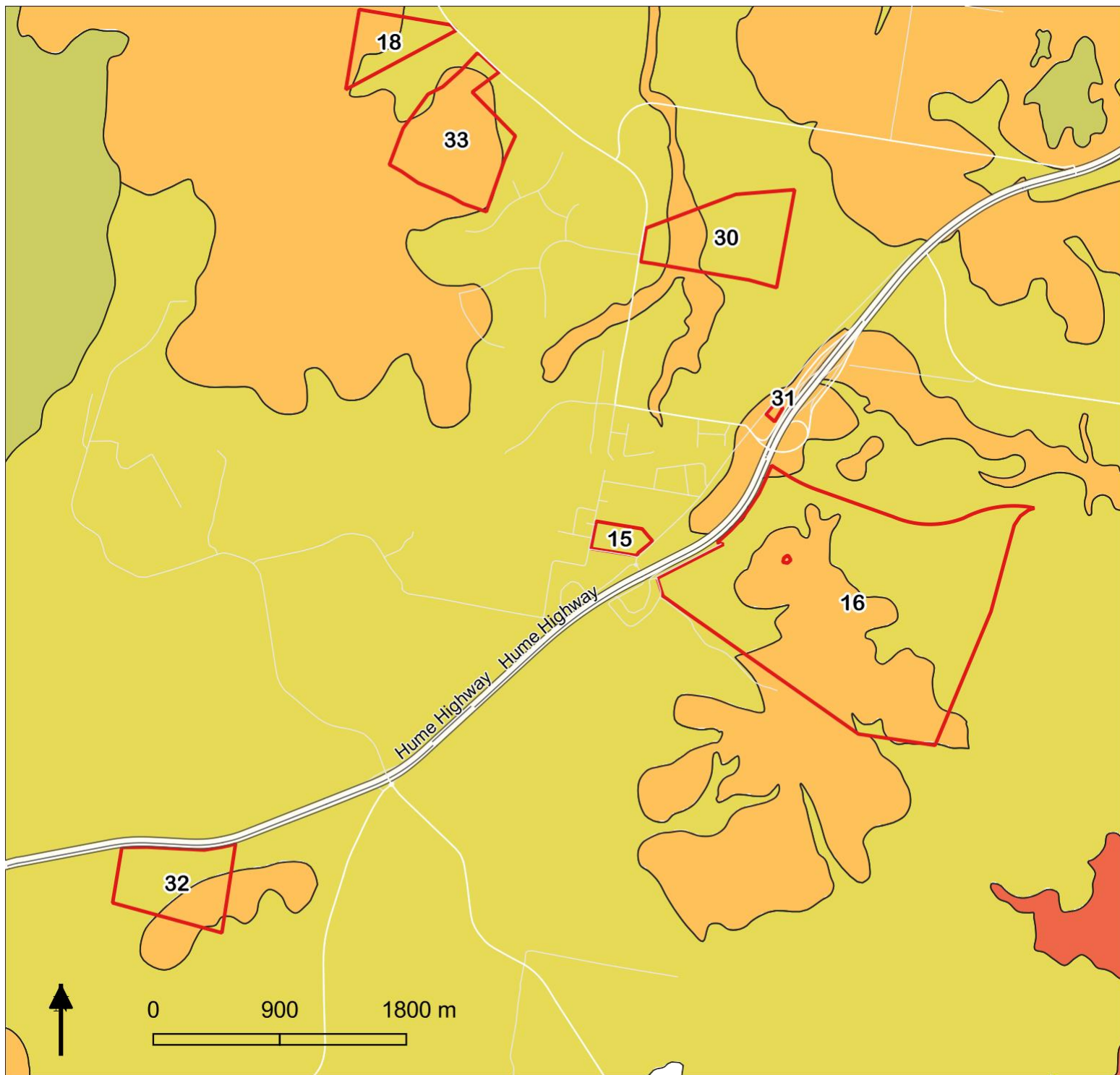
 Sites

 Moderate to severe limitations

 Severe limitations





 Very severe limitations

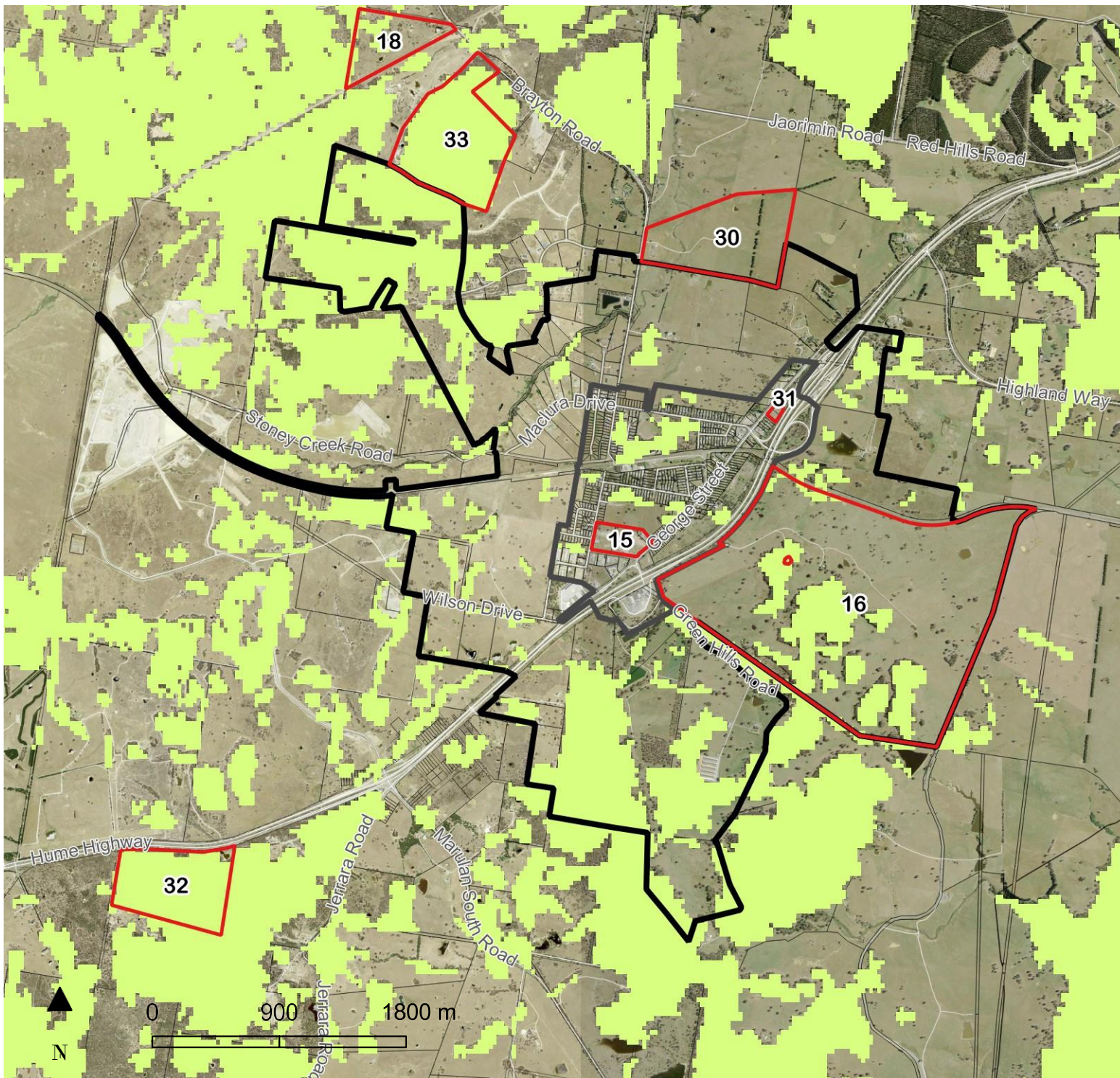
 Extreme limitations



High Environmental Value Map

Legend

-  Sites
-  Urban area
-  Urban fringe
-  HEV South East and Tablelands



Vegetation Communities Map

Legend

Sites

Urban area

Urban fringe

None

Dry Forest

Bungonia Slates Woodland

Eastern Tablelands Dry Forest

Grey Myrtle Dry Rainforest

Intermediate Temperate Rainforest

Tableland Bog

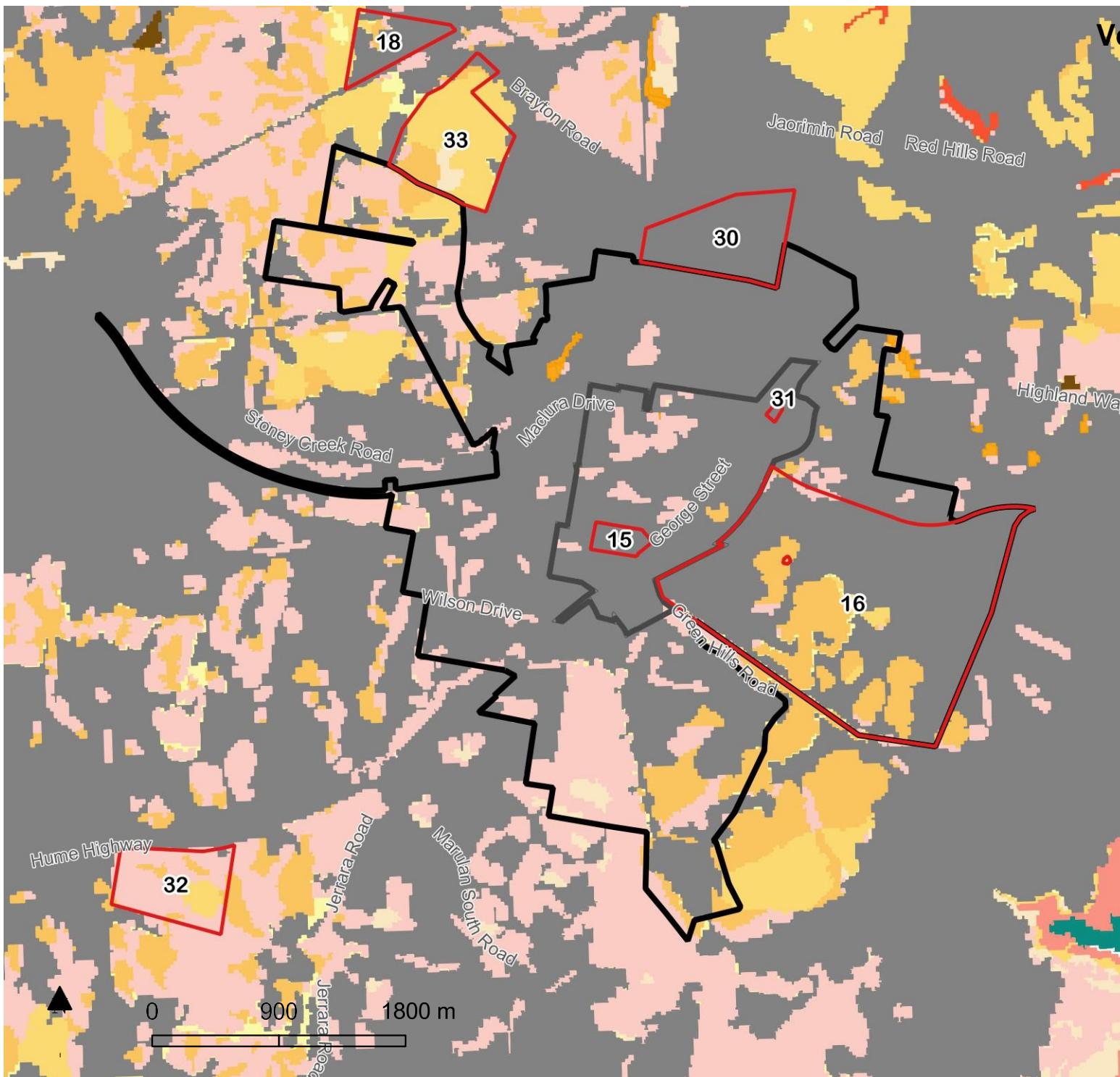
Tableland Grassy Box-Gum Woodland

Tableland Hills Grassy Woodland

Tableland Low Woodland

Tableland Swamp Flats Forest

Tableland Swamp Meadow



5 Site Assessment

A total of 39 Sites were assessed based on the criteria identified above. The sites have been grouped together for ease of assessment. The assessment has been undertaken at a strategic level, largely based on the constraints mapping, but having regard for the criteria as well.

Goulburn North-West Opportunity Sites

Area/s Number	2, 21 and 28
Area Name	Crookwell Rd
Constraints	Environmental, outside fringe Three of the sites are outside the urban fringe. Constraint mapping identified the conservation value as low, however, Terrestrial Biodiversity Mapping indicates site 21 as being impacted. Sites 2 and 28 are also mapping as productive agricultural land. Site 26 has high conservation value. Whether there may be an opportunity to offset this, should be investigated. The site will likely be surrounded by urban development and the potential loss of connectivity should be considered in any overall plan for the immediately surrounding areas.
Current Zoning	E3 Environmental Management
Current MLS (ha)	100
Recommendations	No Change.

Area/s Number	26
Area Name	Mistful Park Crookwell Rd
Constraints	Environmental constraints. The site has high conservation value. Whether there may be an opportunity to offset this, should be investigated as the location is contiguous with the Marys Mount urban area. The site will likely be surrounded by urban development and the potential loss of connectivity should be considered in any overall plan for the immediately surrounding areas.
Current Zoning	E4 Environmental Living
Current MLS (ha)	10ha
Recommendations	Consider the potential for residential development in the context of the expansion of the urban area subject to a site specific biodiversity assessment.

Goulburn North Opportunity Sites

Area/s Number	1, 5, 14, 24 and 14
Area Name	North of Mary's Mount Road
Constraints	These sites are relatively unconstrained with only moderate biodiversity impacts in some places. The land is in sequence and has been included in the release area recommendation for Goulburn.

Current Zoning	RU6, R2, E4
Current MLS (m²)	Ranging from 700 m ² to 10ha
Recommendations	Propose to include land in the Planning Proposal to be submitted in support of the release of additional residential land in Goulburn
Proposed Future Zoning	R2
Proposed Future MLS (m²)	700

Area/s Number	6 & 12
Area Name	North of Mary's Mount Road
Constraints	These sites are relatively unconstrained with only moderate biodiversity impacts in some places, however, part of the sites is mapped as Strategic Agricultural Land in the LEP. The land, including these sites, west of Crookwell Road has been identified as the medium to long term supply of urban land for Goulburn
Current Zoning	RU6 and E4
Current MLS (m²)	Ranging from 700 m ² to 10ha
Recommendations	Propose to include land in the Housing Strategy as future urban land

Goulburn West Opportunity Sites

Area/s Number	3, 4, 8, 9, 10, 17, 19, 22, 35 and 37
Area Name	West Goulburn – Run-O-Waters area
Constraints	This area was initially considered suitable to provide an extension of the large lot residential development already supported in the area. Current MLS allow subdivision to 2,000m ² to 2ha and lot averaging also applies or lots in this area are as small as 1ha. However, the assessment by Ecological confirms significant environmental constraints to future subdivision and development. Further, Site 9 currently acts as a buffer to the B6 enterprise Corridor zone
Current Zoning	Mix of E4 + B6, RU6 and E4 + R5
Minimum Lot Size	Variable 10ha, 2ha, 2000m ²
Recommendations	No Change

South Goulburn

Area/s Number	11, 13, 20 and 25
Area Name	Goulburn South – South of Hume Highway
Constraints	Location – south of Hume Highway. Site 2 is significantly impacted by flooding. Sites 11, 13 & 25 are constrained by significant areas on land identified as having high conservation value
Current Zoning	RU1, RU2, RU6
Current MLS	10ha-100ha
Recommendations	No Change

Goulburn East – rezoning not supported

Area/s Number	7, 23, 27, 34 and 38
Area Name	Goulburn East
Constraints	Biodiversity, not contiguous, flooding and rail line mean will never be contiguous to Goulburn town. Site 23 may have some potential being contiguous with Eastgrove, however, high value conservation identification will make this difficult.
Current Zoning	RE1, RU2, RU6, B6
Current MLS (m²)	10-100ha
Recommendations	Re-zoning generally not supported, however, both site 7 and site 38 could potentially be considered as Stewardship Sites for biodiversity offsets given their size and limited fragmentation. Site 23 could be further investigated to provide housing choice east.

Area/s Number	39
Area Name	Waste Water Irrigation Area
Constraints	<p>The site has been decommissioned and is surplus to Council requirements and will need a more suitable land use zone.</p> <p>Part of the site is constrained by flooding and biodiversity, however, areas least constrained may be suitable for rural residential development subject to further detailed assessment. The land is also potentially contaminated and any rezoning would need to include a Preliminary Site Investigation (PSI) Clause 6 of the SEPP 55.</p> <p>The former irrigation area may provide an opportunity for additional rural residential development with a MLS of 2ha in the area adjoining Taralga Road and Kenmore (subject to detailed assessment of environmental constraints) consistent with Council's resolution on 7 November 2018. Given the size of the area any rezoning should consider a concept layout incorporated into a DCP and a staging plan for the release of land. Alternatively, a maximum lot size could be considered to avoid inefficient lot sizes.</p>
Current Zoning	SP2 Infrastructure (Public Utility Undertaking)
Current MLS	NA
Recommendations	Consider Planning Proposal for rural residential development including detailed environmental assessment and concept layout.

Goldsmith Street

Area/s Number	36
Area Name	Goldsmith Street
Constraints	The site is in the centre of Goulburn in the Commercial Core zone. It is not a Heritage Item but within the Heritage Conservation Area. It is off the main street with good access and could be considered as a Key Site for mixed use residential development.
Current Zoning	B3 Commercial Core
Current MLS	N/A
Recommendations	Consider Planning Proposal by Landowner

Marulan Opportunity Sites – re-zoning supported

Area/s Number	15 & 30
Area Name	Marulan growth area
Constraints	Both sites are relatively unconstrained with a water course showing as high value conservation on site 30. Site 30 is already identified as a transition zone. Site 15 is the Truck Stop and although is zoned industrial, rezoning for residential purposes would improve the amenity and character of the southern entrance to the town. Sufficient industrial land is available to accommodate future demand.
Current Zoning	IN1, RU6
Current MLS	Up to 100ha
Recommendations	Site 30 should be retained for future urban purposes, suggest monitor release of land and look at medium to long term supply Site 15 could be considered for rezoning subject to a landowner led proposal

Marulan Business Zone

Area/s Number	31
Area Name	131-139 George St
Constraints	Unconstrained. Need to consider the impact of allowing residential use in a business area on the future commercial needs of the town
Current Zoning	B2 Local Centre
Current MLS	N/A
Recommendations	Council consider a Planning Proposal on merit to assess the strategic merit of a proposal to enable additional uses on the site

Marulan Sites Outside Urban Fringe

Area/s Number	16, 18, 32 & 33
Area Name	Marulan outside urban fringe
Constraints	Location, not contiguous, constraints, mineral resources, bushfire hazard, high value biodiversity, sufficient land to meet anticipated demand
Current Zoning	RU2, RU6
Current MLS	100ha
Recommendations	No change

6 Conclusion

Each of the 39 Sites was considered having regard to a range of criteria. The assessment undertaken was at a strategic level and while it provide initial recommendations for the sites, nothing prevents individual landowners or applicants from lodging site specific Planning Proposals for consideration by Council.

A **Biodiversity Constraints Analysis**

Goulburn Mulwaree Urban Fringe Housing Strategy – Constraints Analysis

Area of interest

The area of interest consists of the lands within a 5km radius of Goulburn and Marulan. A number of lots were identified and provided within this urban fringe as lands with potential for development (Figures 1 and 2). Each lot was referred to with a numerical site identifier.

Initial constraints based on the available data were assessed for each of these lots.

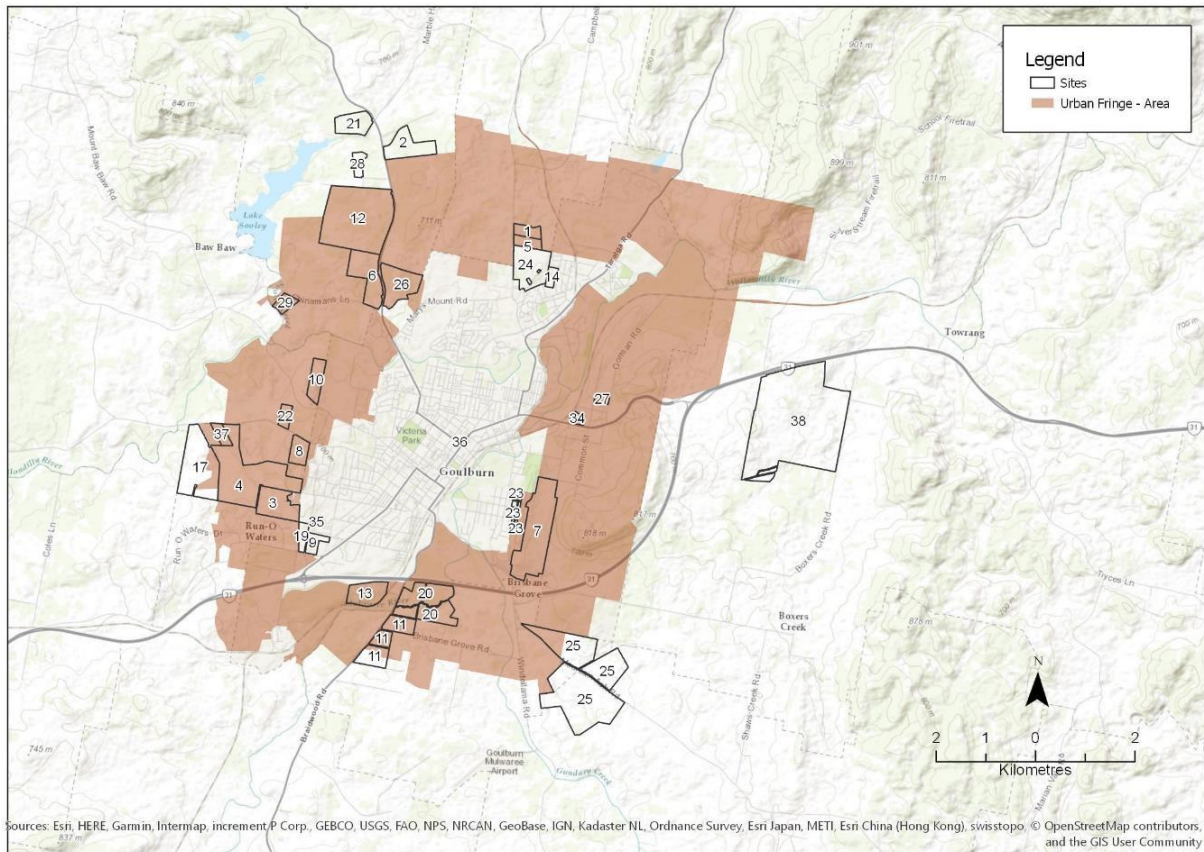


Figure 1: Goulburn study area sites

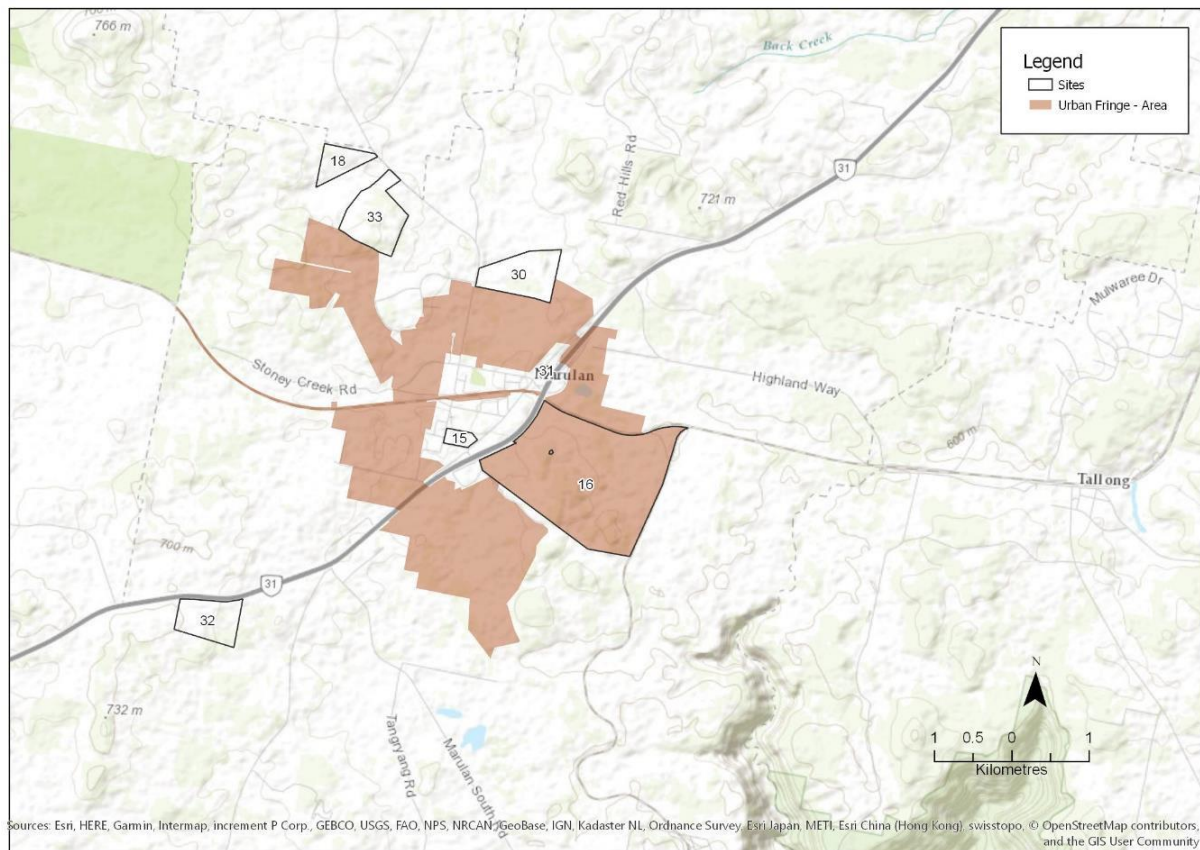


Figure 2: Marulan study area sites

Data

A number of key data sets were identified to assist and support analysis for the Strategy. Data sets included:

Theme	Data	Source	Usage
Biodiversity	Threatened species locations (State/Commonwealth)	Atlas of NSW Wildlife/BioNet (available OEH) EPBC Protected matters search (available DEE)	Identified recorded threatened species within 5km of study area sites Protected matters search tool for matters of National Environmental Significance within a 5km radius of Goulburn and Marulan
Biodiversity	Vegetation type mapping Threatened ecological communities (State/Commonwealth)	Elton / SELLS	Identified candidate TECs across study area sites
Biodiversity	Conservation Significance Assessment (CSA) mapping	Elton	Identified areas of High / Moderate / Low significance by site
Bushfire	Bushfire Prone Land Mapping	RFS / Council	

Theme	Data	Source	Usage
Riparian	Drainage	Strahler classified drainage (available	Buffered stream order
	Strahler stream order classification	LPI)	according to Office of Water DPI riparian corridor widths for Riparian buffers
Conservation	Reserves (State and Council lands) Open Space and conservation / environmental land	NPWS Estate (available OEH) LEP land zoning (available DPE)	
Vulnerable lands	Steep slopes or highly erodible	State-wide dataset (available OEH)	
Agricultural	Land classification Land use	Land and soil capability (available OEH) Land use mapping (available DoAWR)	
Lot boundaries	Cadastre	Council	
Sites	Cadastre	Elton	Study area to base constraints assessment

Biodiversity Values

Threatened Ecological Communities (TECs)

Two TECs are mapped within the study area sites, they are:

- White Box-Yellow Box-Blakely's Red Gum Grassy Woodland and Derived Native Grassland (Listed under the BCA and EPBC)
- Natural Temperate Grasslands of the Southern Tablelands of NSW and the ACT (Listed under EPBC)

The breakdown of the amount of TECs across the study sites is shown in Tables 1 and 2 and mapped in Figures 3 and 4.

Table 1: Area of TECs within the study area sites – Goulburn

Study site ID	Vegetation (ha)			Site (ha)	% TEC of Site	% TEC of Vegetation
	TEC	Other Vegetation	Total vegetation			
1	<0.01	4.40	4.40	12.42	<1%	<1%
2	-	0.75	0.75	39.66	-	-
3	8.87	25.26	34.13	42.97	21%	26%
4	0.20	66.34	66.55	131.73	<1%	<1%
5	0.42	1.48	1.90	11.86	4%	22%
6	0.29	4.90	5.20	50.51	1%	6%
7	0.49	92.76	93.25	108.44	<1%	1%
8	-	8.94	8.94	18.53	-	-
9	6.38	5.09	11.47	11.75	54%	56%
10	0.45	16.86	17.32	21.41	2%	3%
11	6.76	36.10	42.87	52.22	13%	16%
12	0.06	19.96	20.02	165.25	<1%	<1%
13	1.59	3.17	4.75	32.27	5%	33%
14	0.01	1.85	1.86	7.56	<1%	1%
17	19.84	49.61	69.45	89.25	22%	29%
19	<0.01	9.21	9.21	9.43	<1%	<1%
20	7.78	48.60	56.38	76.02	10%	14%
21	0.59	0.38	0.97	28.70	2%	61%
22	-	8.55	8.55	10.10	-	-
23	-	6.79	6.79	9.57	-	-
24	6.62	17.48	24.10	52.25	13%	27%
25	20.27	114.43	134.70	232.68	9%	15%
26	23.49	3.23	26.72	45.88	51%	88%
27	-	2.92	2.92	4.50	-	-

Study site ID	Vegetation (ha)			Site (ha)	% TEC of Site	% TEC of Vegetation
	TEC	Other Vegetation	Total vegetation			
28	-	1.99	1.99	10.03	-	-
29	1.87	3.54	5.42	11.36	16%	35%
34	<0.01	1.64	1.64	3.08	<1%	<1%
35	-	1.07	1.07	1.71	-	-
37	-	4.68	4.68	10.12	-	-
38	86.49	194.34	280.83	434.98	20%	31%
Total	192.49	756.33	948.82	1736.23		20%

Table 2: Area of TECs within the study area sites – Marulan

Study site ID	Vegetation (ha)			Site (ha)	% TEC of Site	% TEC of Vegetation
	TEC	Other Vegetation	Total vegetation			
16	4.43	56.92	61.35	288.06	2%	7%
18	0.44	3.73	4.18	21.37	2%	11%
32	29.45	9.67	39.12	40.05	74%	75%
33	0.50	49.95	50.45	54.69	1%	1%
Total	34.83	120.27	155.09	404.17		22%

TECs exist in 22 of the 31 sites in Goulburn's urban fringe. Of these 22 sites, 9 contain TECs that cover greater than 10% of the site. The areas with the greatest areas of TECs are site 9 (54% of the site) and site 26 (51% of the site)

Four of the seven sites in the Marulan urban fringe contain TECs. Of these, site 32 contains TECs that cover 74% of the site. In the other 3 sites, TECs cover 2% or less than each site.

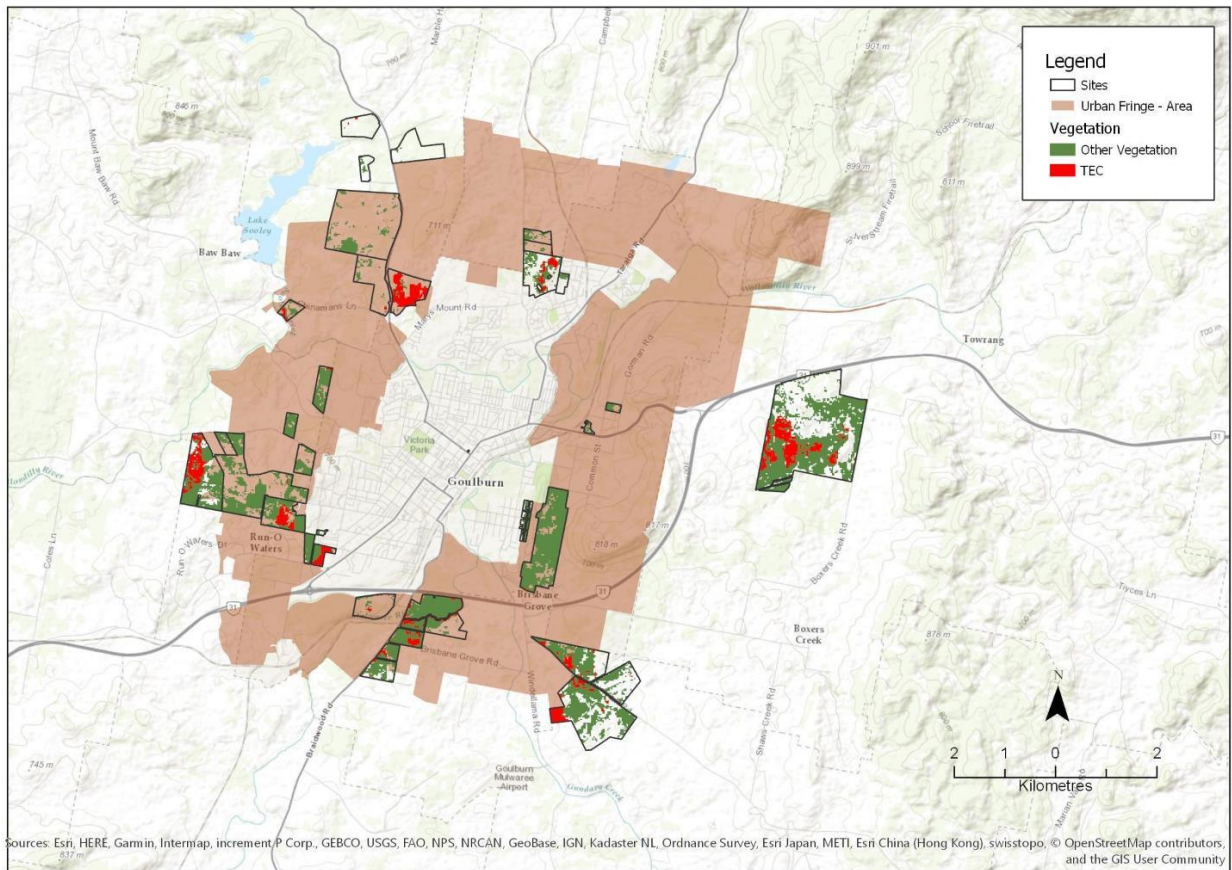


Figure 3: Goulburn TECs

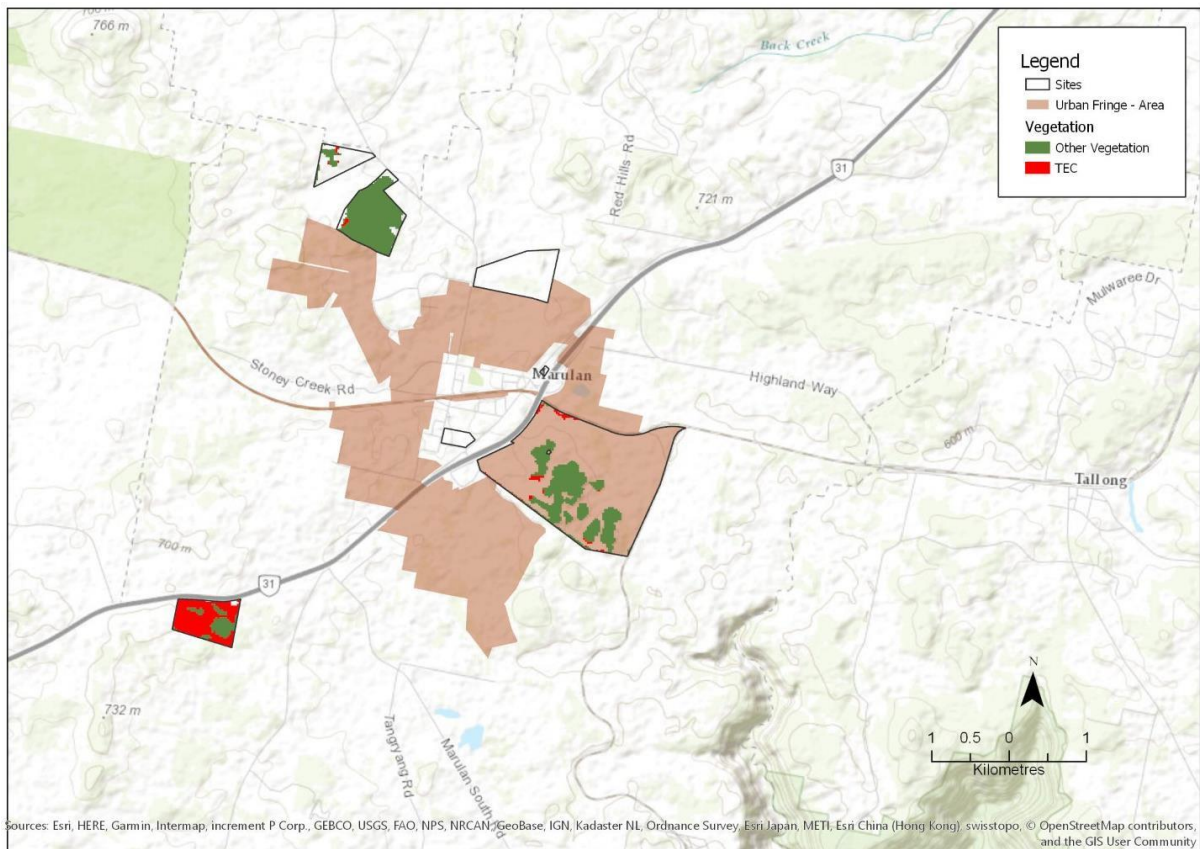


Figure 4: Marulan TECs

Threatened Species

A search of the Atlas of NSW Wildlife (BioNet) was carried out in October 2018 to identify records of threatened flora and fauna within 5km of the study area sites.

Threatened fauna

A total of 27 fauna species listed under the BC Act, including 6 species listed under the EPBC Act, were identified within 5km of the study sites (Table 3).

No threatened species were recorded within the study sites in the Goulburn urban fringe (Figure 5), however, 4 fauna species have been recorded within Sites 16 and 32, in the Marulan urban fringe (Figure 6).

Threatened species recorded within sites included a Koala within site 32 and the following threatened fauna species within Site 16:

- Brown Treecreeper
- Diamond Firetail
- Eastern Bentwing-bat

Table 3: Recorded threatened fauna species within 5km of study area sites

Class	Scientific Name	Common Name	BC Act	EPBC Act	Recorded number of individuals*
Aves	<i>Anthochaera phrygia</i>	Regent Honeyeater	E	CE	2
Aves	<i>Artamus cyanopterus cyanopterus</i>	Dusky Woodswallow	V	-	20
Aves	<i>Callocephalon fimbriatum</i>	Gang-gang Cockatoo	V	-	27
Aves	<i>Calyptorhynchus lathami</i>	Glossy Black-Cockatoo	V	-	8
Aves	<i>Chthonicola sagittata</i>	Speckled Warbler	V	-	7
Aves	<i>Climacteris picumnus victoriae</i>	Brown Treecreeper (eastern subspecies)	V	-	1
Aves	<i>Daphoenositta chrysoptera</i>	Varied Sittella	V	-	2
Aves	<i>Ephippiorhynchus asiaticus</i>	Black-necked Stork	E	-	1
Aves	<i>Falco subniger</i>	Black Falcon	V	-	0
Aves	<i>Glossopsitta pusilla</i>	Little Lorikeet	V	-	11
Aves	<i>Hieraaetus morphnoides</i>	Little Eagle	V	-	2
Aves	<i>Lophoictinia isura</i>	Square-tailed Kite	V	-	0
Aves	<i>Melanodryas cucullata cucullata</i>	Hooded Robin (south-eastern form)	V	-	0
Aves	<i>Ninox strenua</i>	Powerful Owl	V	-	1
Aves	<i>Petroica boodang</i>	Scarlet Robin	V	-	3
Aves	<i>Petroica phoenicea</i>	Flame Robin	V	-	0
Aves	<i>Stagonopleura guttata</i>	Diamond Firetail	V	-	4

Class	Scientific Name	Common Name	BC Act	EPBC Act	Recorded number of individuals*
Mammalia	<i>Chalinolobus dwyeri</i>	Large-eared Pied Bat	V	V	1
Mammalia	<i>Dasyurus maculatus</i>	Spotted-tailed Quoll	V	E	1
Mammalia	<i>Falsistrellus tasmaniensis</i>	Eastern False Pipistrelle	V	-	0
Mammalia	<i>Miniopterus schreibersii oceanensis</i>	Eastern Bentwing-bat	V	-	4
Mammalia	<i>Mormopterus norfolkensis</i>	Eastern Freetail-bat	V	-	0
Mammalia	<i>Petaurus norfolcensis</i>	Squirrel Glider	V	-	2
Mammalia	<i>Phascolarctos cinereus</i>	Koala	V	V	2
Mammalia	<i>Pteropus poliocephalus</i>	Grey-headed Flying-fox	V	V	10
Mammalia	<i>Saccolaimus flaviventris</i>	Yellow-bellied Sheathtail-bat	V	-	1
Reptilia	<i>Delma impar</i>	Striped Legless Lizard	V	V	1

CE – Critically Endangered, E – Endangered, V - Vulnerable

*A value of 0 denotes that while the species has been recorded, numbers of individuals were not noted

Threatened flora

A total of 7 flora species listed under the BC Act, including 5 species listed under the EPBC Act were identified within 5km of the study area sites (Table 4).

No threatened flora species have been recorded within the study area sites.

Table 4: Recorded threatened flora species within 5km of the study area sites

Scientific Name	Common Name	BC Act	EPBC Act	Recorded number of individuals*
<i>Diuris aequalis</i>	Buttercup Doubletail	E	V	0
<i>Eucalyptus aggregate</i>	Black Gum	V	V	0
<i>Eucalyptus macarthurii</i>	Paddys River Box, Camden Woollybutt	E	E	0
<i>Genoplesium plumosum</i>	Tallong Midge Orchid	E	E	70
<i>Pultenaea pedunculata</i>	Matted Bush-pea	E	-	0
<i>Rutidosis leptorrhynchoides</i>	Button Wrinklewort	E	E	0
<i>Solanum celatum</i>		E	-	15

E – Endangered, V – Vulnerable

*A value of 0 denotes that while the species has been recorded, numbers of individuals have not been recorded

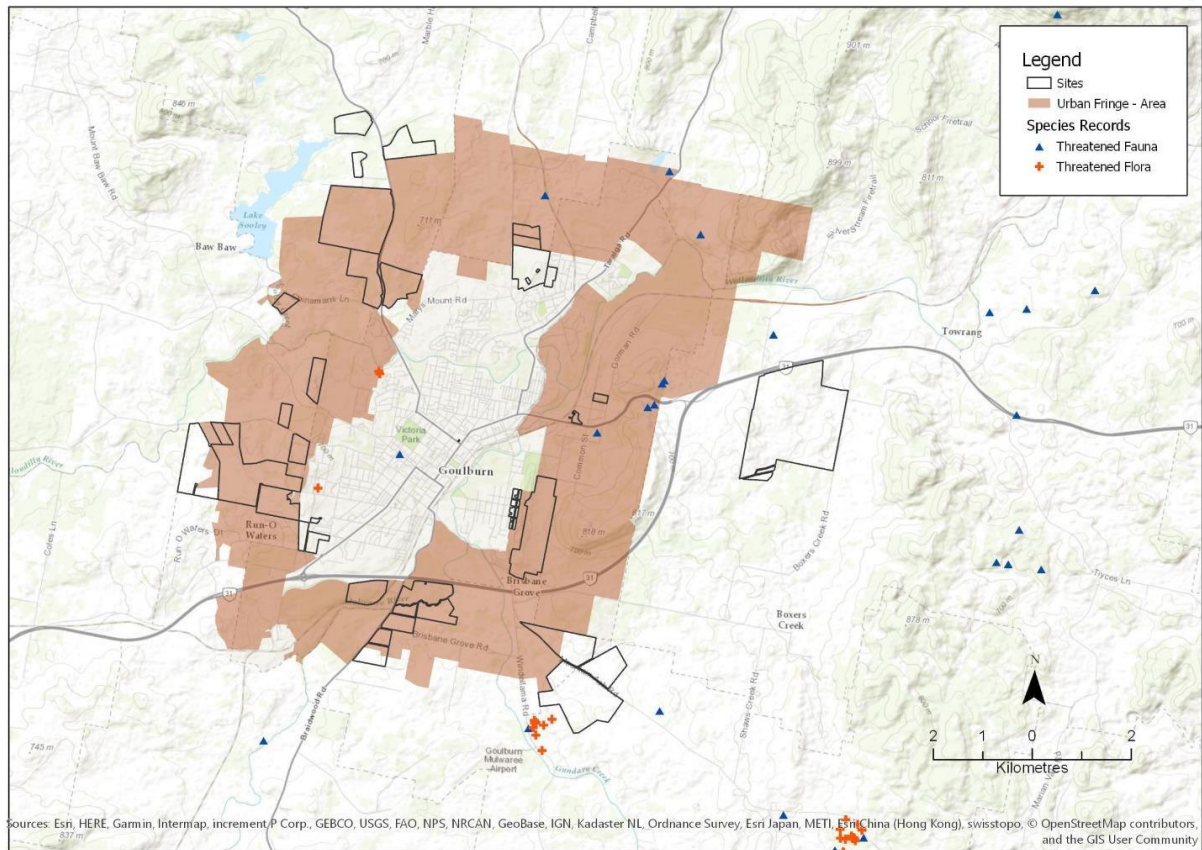


Figure 5: Goulburn - recorded threatened species (Atlas of NSW Wildlife October 2018)

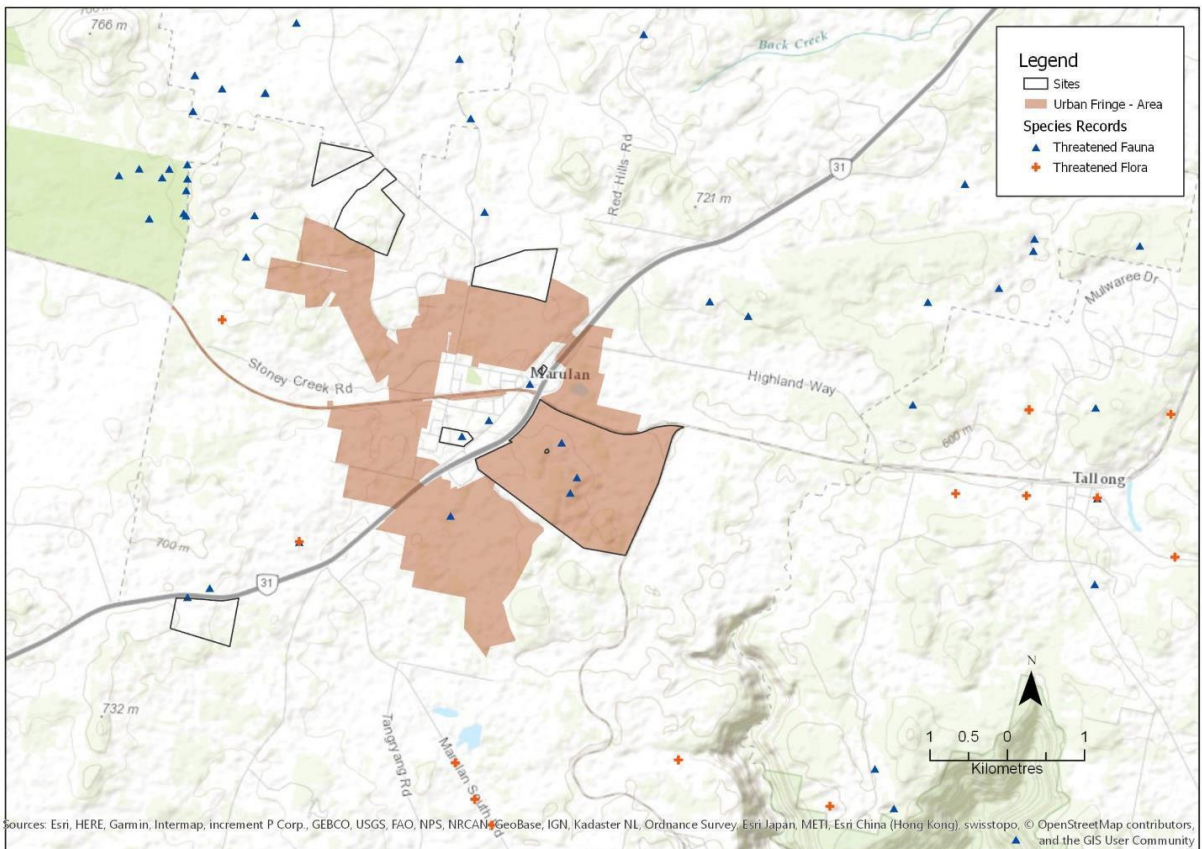


Figure 6: Marulan - recorded threatened species (Atlas of NSW Wildlife October 2018)

Matters of National Environmental Significance (MNES)

An EPBC Act Protected Matters Report (DEE 2018) was generated on 2 November 2018 based on a 5 km buffer around the town centres of Goulburn and Marulan.

The following matters have been identified as being likely to occur or known to occur in the proximity of the study area sites:

- 3 listed threatened ecological communities (TECs) (2 known to occur)
- 21 listed threatened fauna species (6 known to occur)
- 13 listed threatened flora species (5 known to occur)
- 12 listed migratory species

Separate protected matters reports including the details of all identified MNES for Goulburn and Marulan were prepared.

Conservation values

Conservation value information was summarised by each study area site. Conservation values have been broken down into High, Moderate and Low. Areas of High or Moderate conservation value generally include the greatest constraints to development, making up areas of core or support for core habitat. Mapping has been prepared by Council and was obtained via Elton.

A breakdown of the proportion of conservation value by study area site has been summarised in Table 5 and Figure 7 for the Goulburn urban fringe; and Table 6 and Figure 8 for the Marulan urban fringe.

Table 5: Goulburn study area sites conservation values

Study site ID	Conservation values (ha)			Total	% of Site with Higher Constraints*
	High	Moderate	Low		
1	3.91	2.91	5.59	12.42	55%
2	0.39	-	39.27	39.66	1%
3	34.13	3.86	4.98	42.97	88%
4	66.55	13.46	51.72	131.73	61%
5	1.48	3.40	6.98	11.86	41%
6	0.37	7.13	43.01	50.51	15%
7	93.33	4.48	10.63	108.44	90%
8	8.99	1.79	7.75	18.53	58%
9	11.47	0.27	-	11.75	100%
10	17.32	2.48	1.61	21.41	92%
11	42.87	6.68	2.68	52.22	95%
12	0.06	14.20	150.99	165.25	9%
13	4.75	5.12	22.39	32.27	31%
14	1.63	1.21	4.72	7.56	38%
17	69.53	9.81	9.91	89.25	89%

Study site ID	Conservation values (ha)			% of Site with Higher Constraints*	
	High	Moderate	Low	Total	
19	9.21	0.19	0.03	9.43	100%
20	56.72	4.48	14.82	76.02	80%
21	0.75	2.44	25.51	28.70	11%
22	8.55	0.72	0.83	10.10	92%
23	6.79	0.58	2.20	9.57	77%
24	10.78	16.19	25.28	52.25	52%
25	134.70	15.68	82.30	232.68	65%
26	23.49	8.65	13.74	45.88	70%
27	2.92	1.11	0.47	4.50	90%
28	0.05	0.58	9.40	10.03	6%
29	1.94	5.35	4.07	11.36	64%
34	1.64	1.43	-	3.08	100%
35	1.07	0.29	0.35	1.71	80%
36	-	-	0.08	0.08	<1%
37	4.68	0.54	4.91	10.12	52%
38	282.81	61.85	90.31	434.98	79%
Total	902.88	196.89	636.54	1736.31	63%

* Higher constraints includes High and Moderate conservation values

Three sites in the Goulburn urban fringe (Sites 9, 19, 34) are highly constrained with 100% of each site being mapped as High or Moderate conservation value. A further 22 sites include higher constraints across more than 20% of the site, ranging between 31% to 95% (Figure 8). Therefore, 25 of the 31 study area sites within the Goulburn urban fringe have a high proportion of biodiversity constraint across the site.

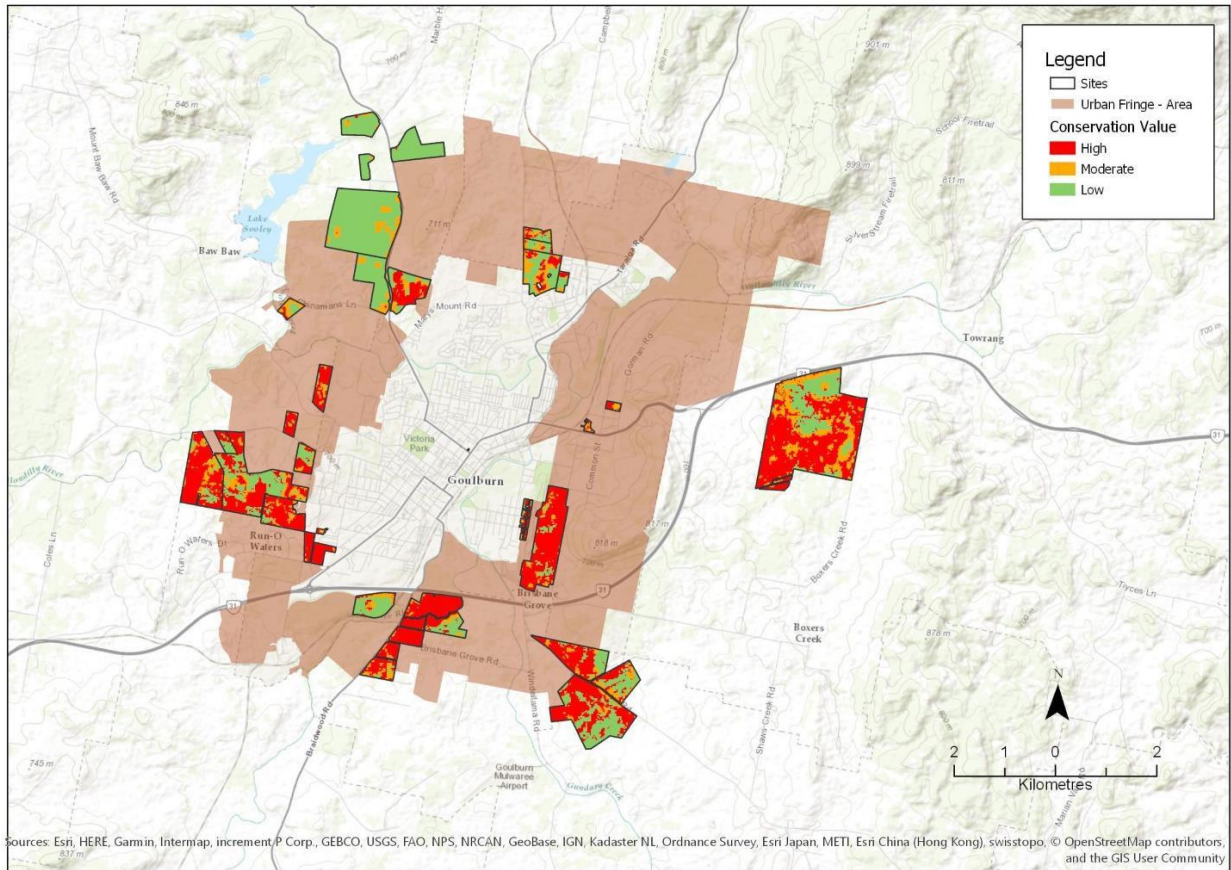


Figure 7: Goulburn conservation values

Table 6: Marulan study area sites conservation values

Study site ID	Conservation values (ha)			% of Site with Higher Constraints*	
	High	Moderate	Low	Total	
15	-	-	7.28	7.28	-
16	55.18	5.95	226.93	288.06	21%
18	2.07	0.89	18.42	21.37	14%
30	2.06	-	47.87	49.93	4%
31	-	-	0.80	0.80	<1%
32	34.97	2.19	2.89	40.05	93%
33	13.46	27.00	14.24	54.69	74%
Total	107.73	36.02	318.42	462.17	31%

* Higher constraints includes High and Moderate conservation values

Three sites in the Marulan urban fringe include higher constraints across more than 20% of the site (Sites 16, 32 and 33), ranging between 21% to 93% (Figure 9). These three sites out of 7 have a high proportion of biodiversity constraint across the site within the Marulan urban fringe.

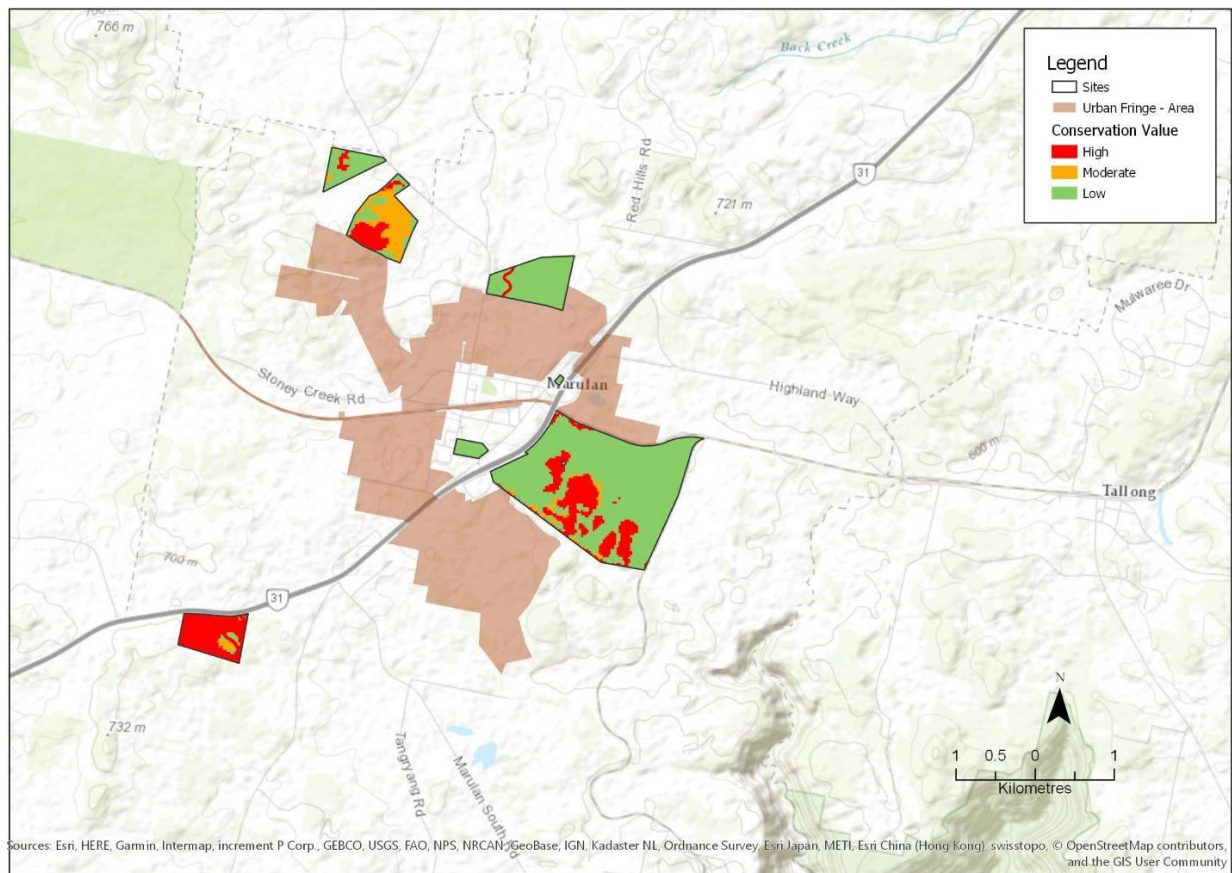


Figure 8: Marulan conservation values

Land Use

Riparian Corridors

Vegetated riparian zone corridor width guidelines for waterfront land are defined by the NSW Office of Water DPI. These apply to controlled activities that are regulated under the Water Management Act, such as urban development. The following extract from the guidelines was used to assess the area of riparian corridor likely to be required with each of the study area sites.

Riparian corridor widths

The Officer of Water recommends a VRZ width based on watercourse order as classified under the Strahler System of ordering watercourses and using current 1:25 000 topographic maps (see Figure 2 and Table 1). The width of the VRZ should be measured from the top of the highest bank on both sides of the watercourse.

Figure 2. The Strahler System

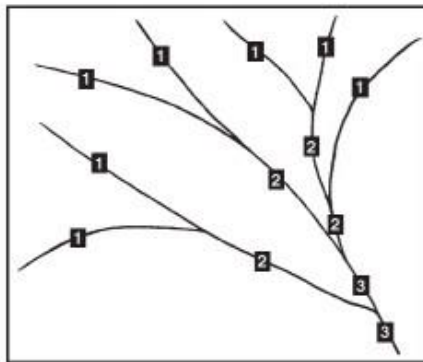


Table 1. Recommended riparian corridor (RC) widths

Watercourse type	VRZ width (each side of watercourse)	Total RC width
1 st order	10 metres	20 m + channel width
2 nd order	20 metres	40 m + channel width
3 rd order	30 metres	60 m + channel width
4 th order and greater (includes estuaries, wetlands and any parts of rivers influenced by tidal waters)	40 metres	80 m + channel width

Note: where a watercourse does not exhibit the features of a defined channel with bed and banks, the Office of Water may determine that the watercourse is not waterfront land for the purposes of the WM Act

Twenty-three of the study area sites within the Goulburn urban fringe include a mapped drainage line. Five of the study area sites include riparian buffers which make up greater than 10% of the site (Sites 1, 2, 20, 25 and 38). A breakdown of the area of riparian buffer required by each site is summarised in Table 7 and shown in Figure 9.

Table 7: Goulburn riparian buffer requirements

Study site ID	Stream Order (ha)				Total	Site (ha)	% Riparian buffer of site
	1st (10m buffer)	2nd (20m buffer)	3rd (30m buffer)	4th or greater (40m buffer)			
1	1.0	1.2	-	-	2.2	12.4	18%
2	1.1	3.4	0.4	-	4.9	39.7	12%
3	1.4	-	-	-	1.4	43.0	3%
4	3.4	1.5	-	-	4.9	131.7	4%

Study site ID	Stream Order (ha)				Total	Site (ha)	% Riparian buffer of site
	1st (10m buffer)	2nd (20m buffer)	3rd (30m buffer)	4th or greater (40m buffer)			
5	0.6	-	-	-	0.6	11.9	5%
6	2.1	0.8	-	-	2.9	50.5	6%
7	2.8	1.9	-	-	4.7	108.4	4%
8	0.5	-	-	-	0.5	18.5	3%
11	0.5	1.6	-	-	2.1	52.2	4%
12	4.2	1.2	-	-	5.4	165.2	3%
13	0.2	-	-	-	0.2	32.3	0%
14	0.0	-	-	-	0.0	7.6	1%
17	1.5	2.5	5.1	-	9.1	89.3	10%
19	0.1	-	-	-	0.1	9.4	1%
20	-	0.2	-	8.2	8.4	76.0	11%
21	1.1	-	-	-	1.1	28.7	4%
24	0.1	-	-	-	0.1	52.3	0%
25	8.6	4.2	-	19.5	32.3	232.7	14%
26	1.2	-	-	-	1.2	45.9	3%
29	-	-	-	0.4	0.4	11.4	4%
34	0.1	-	-	-	0.1	3.1	4%
35	-	0.1	-	-	0.1	1.7	8%
38	13.8	5.0	5.3	29.7	53.9	435.0	12%
Total	44.4	23.6	10.8	57.9	136.6		

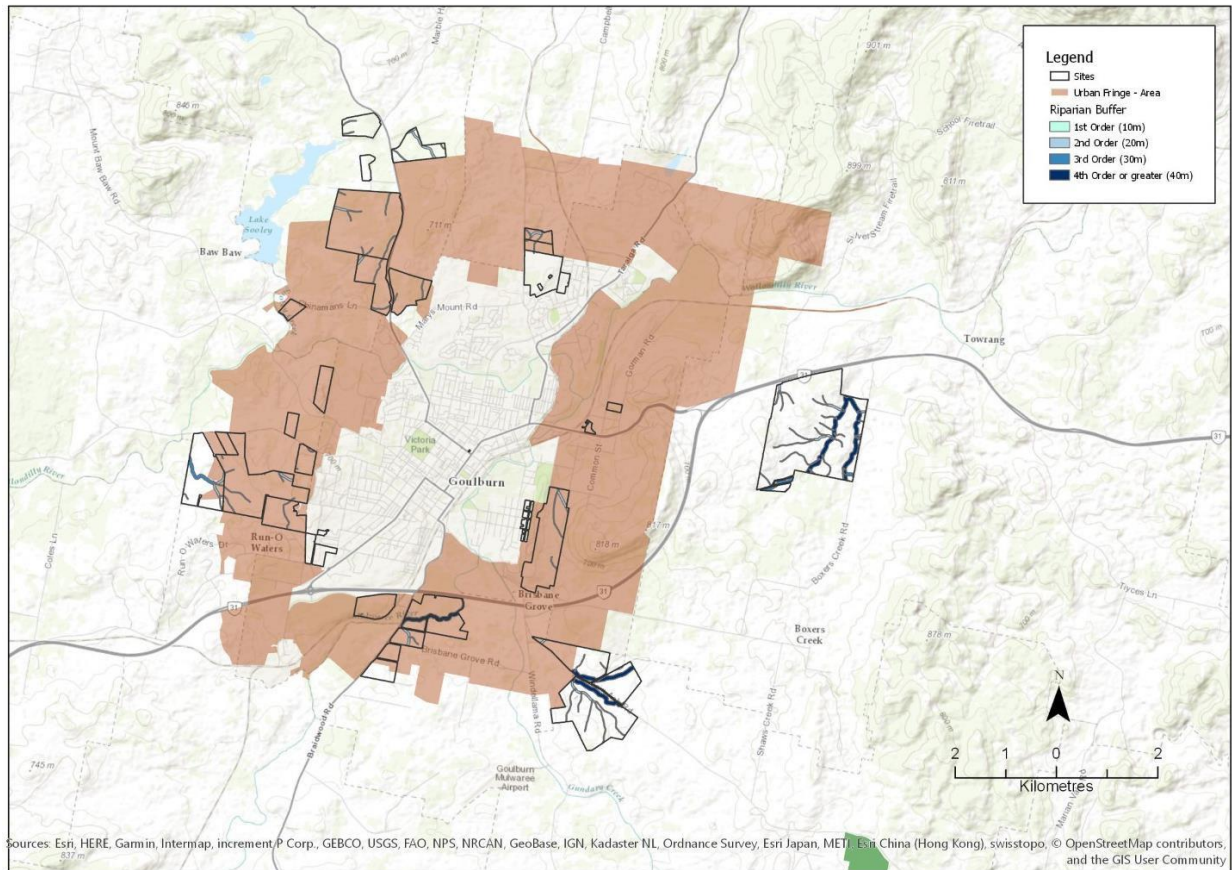


Figure 9: Goulburn riparian buffers

Five of the study area sites within the Marulan urban fringe include a mapped drainage line. One of the study area sites (Site 30) includes riparian buffers which makes up greater than 10% of the site (13%). A breakdown of the area of riparian buffer required by each site is summarised in Table 8 and shown in Figure 10.

Table 8: Marulan riparian buffer requirements

Study site ID	Stream Order (ha)				Total	Site (ha)	% Riparian buffer of Site
	1st (10m buffer)	2nd (20m buffer)	3rd (30m buffer)	4th or greater (40m buffer)			
16	14.4	2.1	0.1	-	16.5	288.1	6%
18	1.4	0.6	-	-	2.0	21.4	9%
30	1.9	0.8	-	4.0	6.6	49.9	13%
32	2.5	0.5	-	-	2.9	40.0	7%
33	3.2	0.4	-	-	3.6	54.7	7%
Total	23.3	4.4	0.1	4.0	31.8		

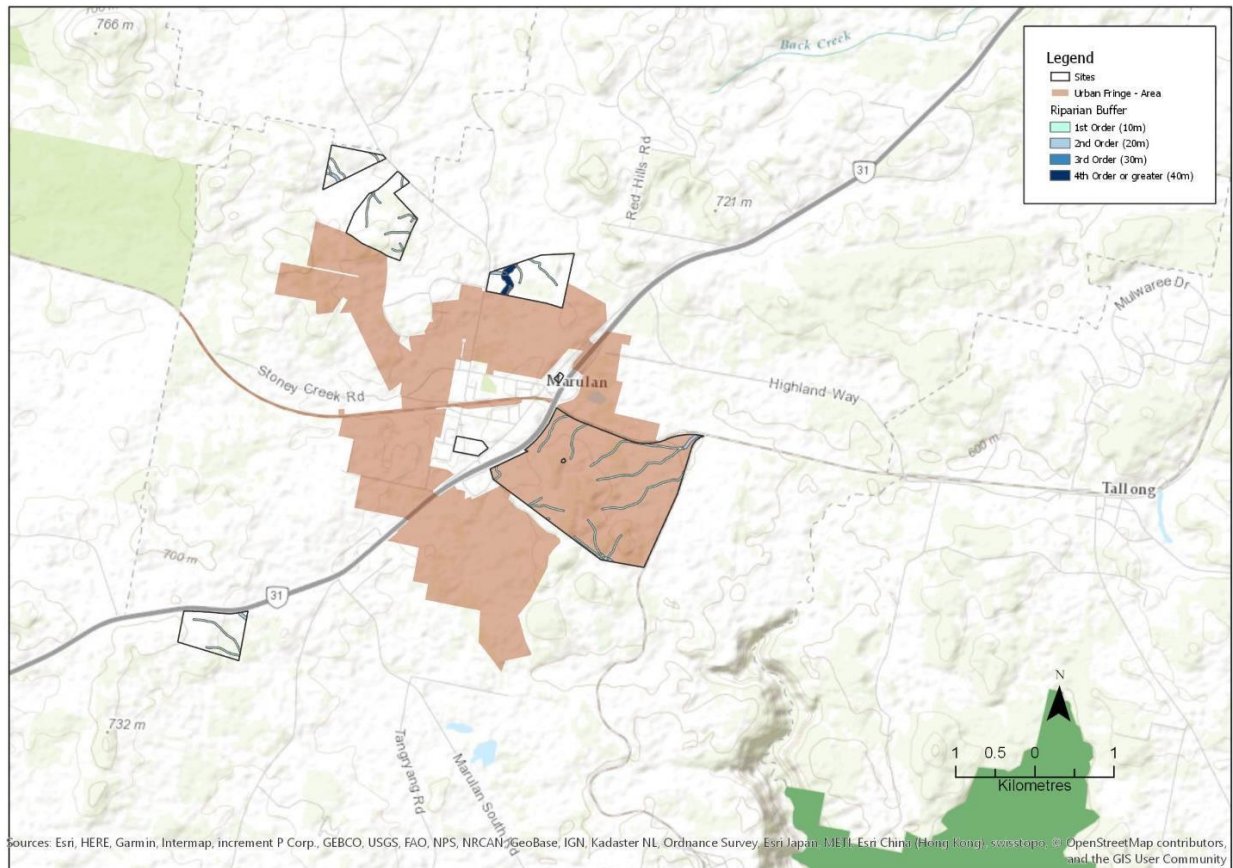


Figure 10: Marulan riparian buffers

Risk

Flood prone land

There are two study area sites which coincide with potential flood risk mapping (Figure 11), sites 11 and 20. Almost all (93%) of study site 20 includes mapped flood risk, while only a small proportion of site 11 is mapped with risk of flooding (Table 9).

Table 9: Areas of sites with potential flood risk

Study site ID	Flood Risk (ha)	Total Site Area (ha)	% Flood risk of Site
11	1.94	52.22	4
20	70.29	76.02	93

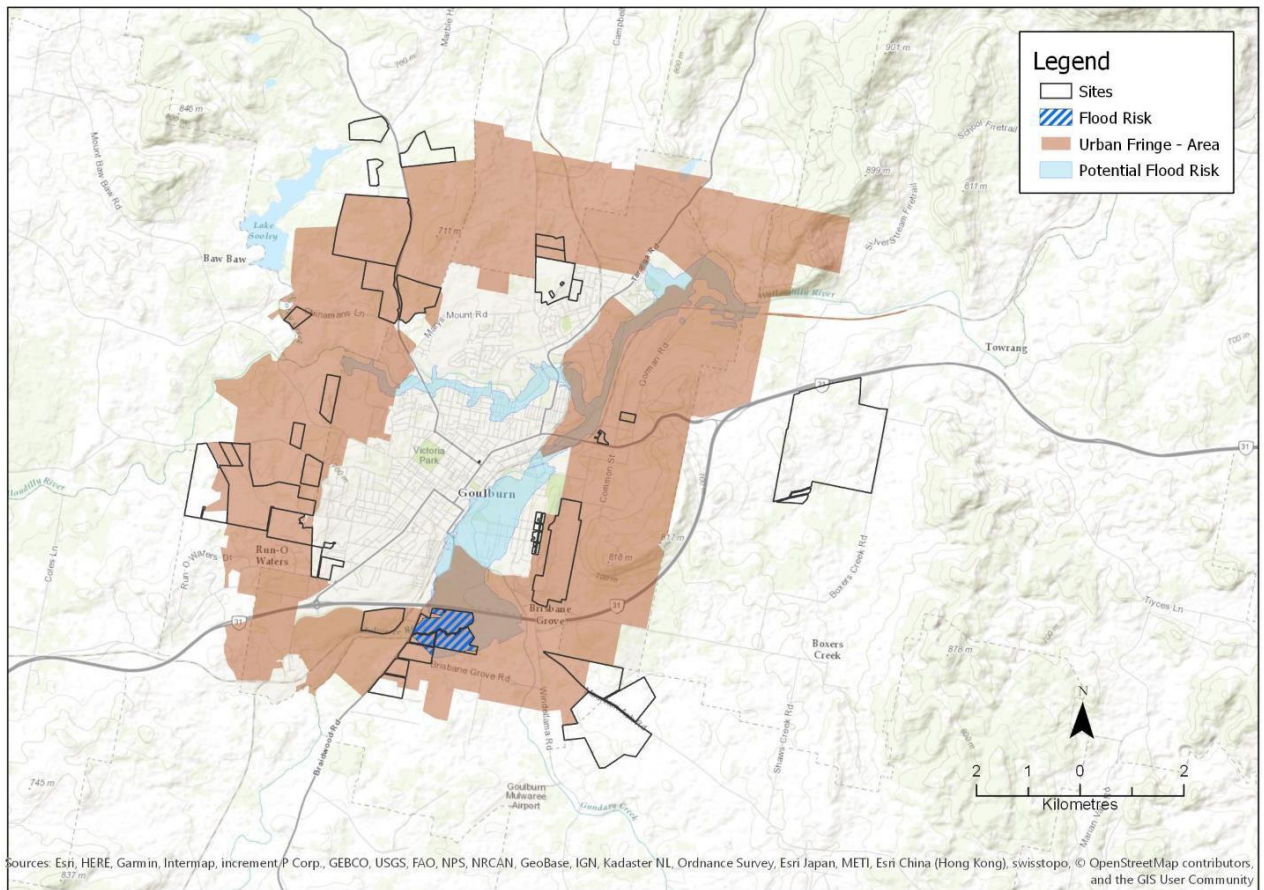


Figure 11: Potential flood risk

1.1.1 Steep Lands –Slope

While there are lands in the Goulburn and Marulan region that have been identified as steep and highly erodible (Figure 12); there are no study area sites which occur on those mapped lands with slopes of 18° or greater (OEI 2011).

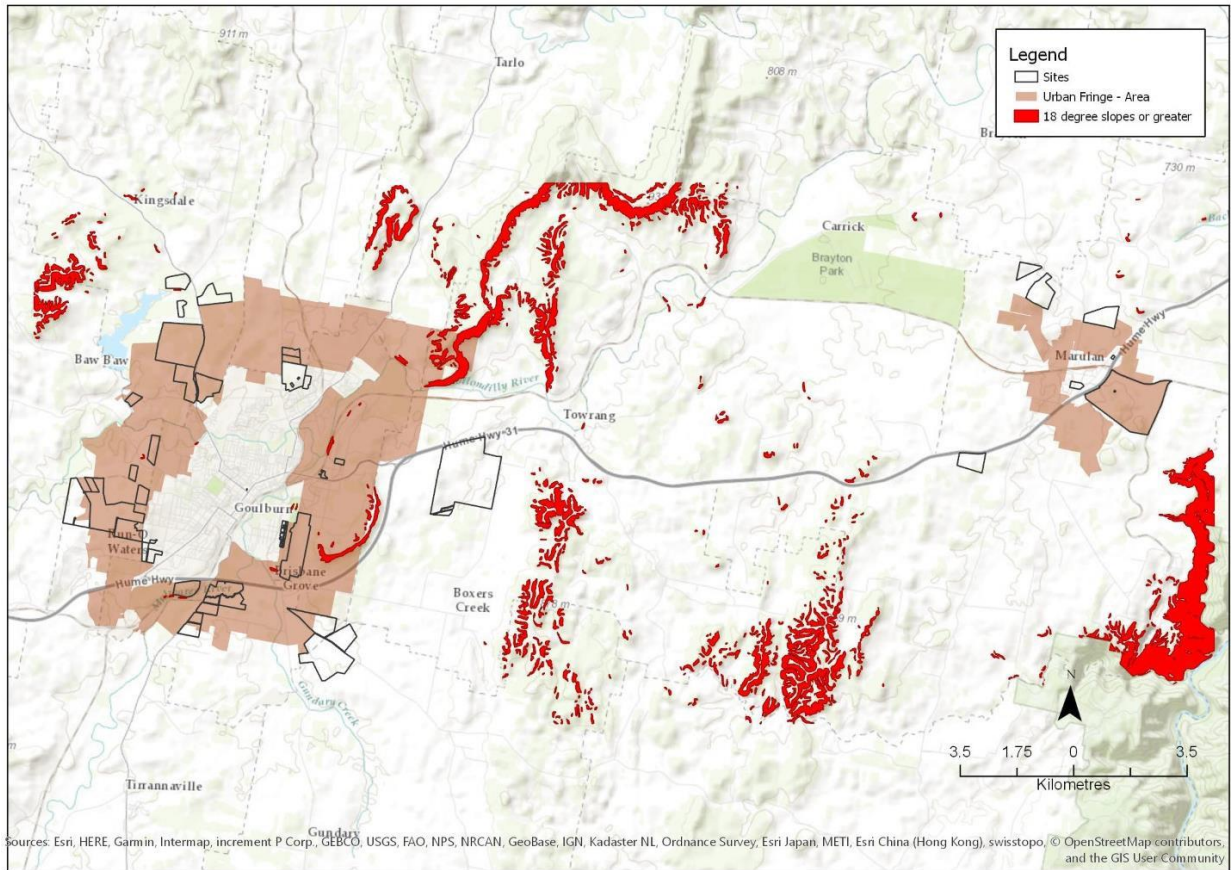


Figure 12: Steep slopes - greater than or equal to 18 degrees

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B Council Documents

**B-1 Council Meeting Business Paper
Enclosure 21 April 2020**



ATTACHMENTS

ENCLOSURES

Ordinary Council Meeting

21 April 2020

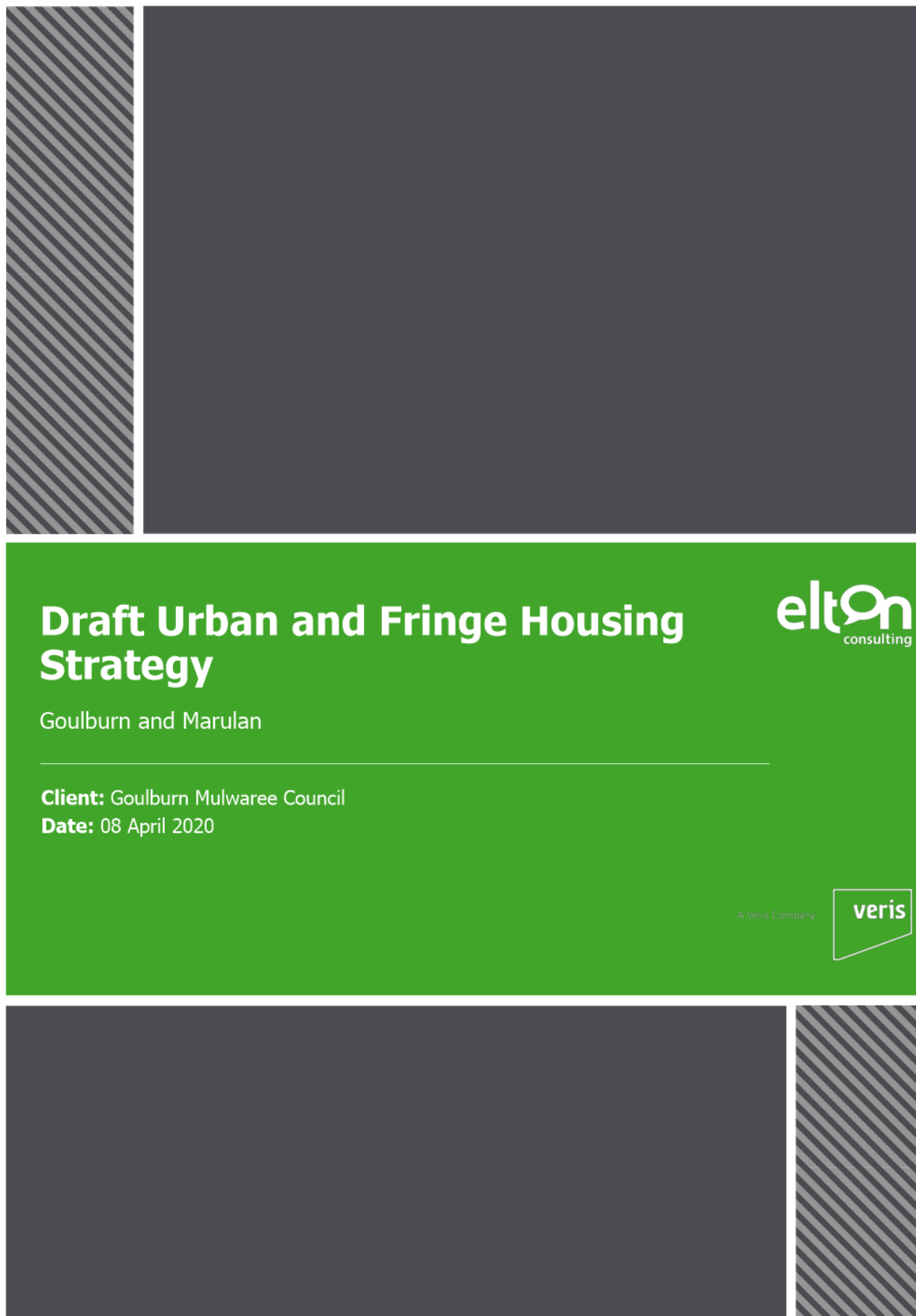
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25/02/20	V1.2	Claire Adams	Liz Densley	Liz Densley Final
20/03/2020	V1.3			Reissued
08/04/2020	V1.5			Reissued

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Abbreviations

Abbreviation	Description
ABS	Australian Bureau of Statistics
ACT	Australian Capital Territory
AEP	Annual Exceedance Probability
BSAL	Biophysical Strategic Agricultural Land
CBD	Central Business District
Council	Goulburn Mulwaree Council
DCP	Development Control Plan
DPE	NSW Department of Planning and Environment (now DPIE)
DPIE	NSW Department of Planning, Industry and Environment
DPI	Department of Primary Industries
DSP	Development Servicing Plan
EEC	Endangered Ecological Communities
ELA	Ecological Australia Pty Ltd
EP	Equivalent persons
EP&A Act	Environmental Planning and Assessment Act 1979
GIS	Geographic information system
GMLEP	Goulburn Mulwaree Local Environmental Plan 2009
ha	hectare
HEV	High Environmental Value
Km	Kilometres
LEP	Local Environmental Plan
LGA	Local Government Area
LLS	Local land services
MLS	Minimum Lot Size
NBN	National Broadband Network
NSW	New South Wales
OEH	Office of Environment and Heritage
PMF	Probable Maximum Flood
PPRD	Primary Production and Rural Development
RFS	Rural Fire Services

Abbreviation	Description
SA2	Statistical Area 2
SDWC	Sydney Drinking Water Catchment
SLWCA	Strategic Land and Water Capability Assessments
SEIFA	Socio-Economic Indexes for Areas
SEPP	State Environmental Planning Policy
SETRP	South East and Tablelands Regional Plan
sqm	square metres
SSC	State Suburbs
Strategy	Urban and Fringe Housing Strategy
TEC	Threatened Ecological communities
WSUD	Water sensitive urban design

Executive Summary

This Urban and Fringe Housing Strategy (Strategy) investigates and identifies areas suitable for the provision of additional housing to assist Goulburn Mulwaree Council (Council) meet the housing demands generated by expected continued population growth. The Strategy has been prepared in response to both the limited supply of residential land available to meet the short and medium terms needs of the community and the directions of South East and Tablelands Regional Plan 2036.

The scope of the Strategy includes looking at the urban areas of Goulburn and Marulan and identifying opportunities for an additional recommended 3,500 dwellings over the next 18 years to 2036.

The Strategy also considers land for large lot residential development (typically greater than 2ha and often referred to as rural residential development) particularly on the urban fringe of Goulburn.

The Strategy identifies *opportunity areas* for:

urban residential land – General or Low Density Residential, serviced with reticulated water and sewer and a minimum lot size of 700 sqm

future urban land – investigation areas for future urban residential land that will be critical in the delivery of housing in the very long term in both Marulan and Goulburn

large lot residential land – land suitable for the development of rural residential housing, typically un-serviced. The minimum lot size of 2 ha takes into consideration the Strategic Land and Water Capability Assessment results, the buffer distances required for effluent management areas and the required 'neutral or beneficial effect' of development on water quality within the Sydney Drinking Water Catchment area.

The preparation of the Urban and Fringe Housing Strategy has been overseen by Council's Planning and Environment Directorate, the General Manager and Senior Staff.

Housing Vision and Guiding Principles

The housing vision and principles reflect the outcomes of the community consultation undertaken by Council and submissions received during the public exhibitions of the draft Strategy. The priorities and principles support delivery of the vision, underpin the Strategy and inform the housing actions outlined in Section 4 of the Strategy.

The Strategy consultation informed a vision of the delivery of housing that:

- » encourages higher density residential development closer to the Goulburn CBD
- » relies on the already zoned land to continue to deliver infill and medium density housing in suitable locations
- » considers sites on a merits-basis where serviced lots within the existing urban footprint become surplus to needs, or the land uses change
- » maximises the use of existing infrastructure and minimises the cost of development to Council and the community
- » encourages and meets the demand for a range of lot sizes and dwelling types
- » provides adequate open space, green linkages, and opportunities for walking and cycling
- » considers opportunities for larger lots, especially around Marulan, with a suitable supply of land for this purpose provided for to 2036, identified within the Strategy
- » recognises that rural residential subdivision is land intensive, therefore proposals to rezone to urban residential or to reduce minimum lot sizes outside the areas nominated in this Strategy will generally not be considered by Council
- » avoids environmentally sensitive areas and areas of high value conservation and natural hazards
- » meets the strategic direction articulated in the Regional Plan

Approach

The Strategy aligns with the NSW Department of Planning and Environment (now the NSW Department of Planning, Industry and Environment) *Local Housing Strategy Guideline* and as such is divided into four sections:

Section 1 Introduction

Section 2 The Evidence

Section 3 Precinct Constraints and Opportunities

Section 4 The Priorities

Section 5 Actions

Population and Demographics

Growth across the LGA has been strong over the past decade increasing by 14%. In Marulan population growth has been significant with an increase in population between 2006 and 2016 of 27%.

With the Goulburn Mulwaree LGA expected to reach between 33,350 and 37,202 residents by 2036, approximately 5,000 to 7,000 additional residents are expected. Given the drivers of growth include proximity to economically viable regions and affordable housing, these growth rates may increase over time if prices in Sydney and the ACT continue to rise. Advances in

technology and improvements in transport, for example higher speed rail may further stimulate growth.

Of particular note, between 2016 and 2036, the 35 to 49 and 70 to 84 year old service age groups will be the largest growing groups within the Goulburn Mulwaree LGA. In addition, childless households will make up 59.1 per cent of all households by the year 2036, which is likely to generate an increase in demand for smaller dwellings.

Families with children will continue to reside within the current development front in Goulburn's north as evidenced by the forecast occupancy ratio of 2.60 people per dwelling by the year 2036, the highest of all Goulburn areas.

To provide sufficient appropriate housing through to 2036, population growth, demographics and expected household sizes needs to be compared with current housing supply to determine the expected housing and residential needs of Goulburn and Marulan.

Further housing appropriate for families is required in the short to long term. Housing appropriate for the aging population will be required to allow current residents to age in place. Additionally, housing appropriate for ageing populations can be appropriate for residents seeking affordable and efficient living options.

Housing Demand

The majority of recent growth has been through residential subdivisions in Goulburn and Marulan. These new subdivisions have typically provided R2 Low Density Residential zoned land with a minimum lot size of 700sqm. The market responded well to these releases driving demand for additional land as the currently zoned land nears full utilisation.

Further to the demand for the typical 700sqm house block, there is an emerging trend for more compact living close to the urban core. Recent development activity and increasing supply in this form of higher density development indicate the acceptance of the market to sacrifice large block sizes for more compact living with improved proximity and access.

Anecdotal evidence gained through the initial community and stakeholder engagement process indicated demand for large lot residential blocks (2ha). This was corroborated by Council analysis of rural residential lot uptake on the western and south western Goulburn fringes over the past decade. Council found that 200 of the 290 lots registered had a dwelling approved, or a development application lodged. Most of which were within 2 years of lot registration. The relatively low subdivision costs associated with creating these lots has resulted in this form of development being the preference of proponents looking to rezone land. These products offer diversity in lifestyle choice. Given the current and expected demand for residential land in Goulburn and Marulan it would be anticipated that small volumes of large lot residential land will be absorbed by the market, however, the actual annual demand is difficult to determine.

Given that household sizes are expected to decline and population will continue to grow. It is estimated that an additional 3,359 dwellings will be required to meet demand to 2036. If a 10% surplus is maintained to provide a buffer to accommodate fluctuation in the market, this could be as high as 3,695 dwellings.

For the purposes of analysis, the housing demand has been assumed to be midway at **3,500 dwellings (195 dwellings per year assuming 18 years)**.

Dwelling Approvals

In the 10 years to 2017, Council and private certifiers issued approvals for 1,303 dwellings, which is an average of 130 residences per annum. The majority of approvals were for single detached dwellings (820), of which 105 were located in Marulan. Approvals for multi-dwelling housing accounted for 474 dwellings over the same period, all of which were in Goulburn.

During this 10 year period, Goulburn has experienced significant subdivision activity, particularly in the area around Marys Mount. A total of 1,279 lots have been approved under subdivision applications in Goulburn to 2017. Marulan has also experienced growth in the development of land for housing with an additional 82 lots approved to 2017. In the years between 2009 to 2017 (8 Years) 583 lots were approved in the Marys Mount in Goulburn alone (72 lots per annum).

Dwelling approvals – Infill

Analysis of development approvals for Goulburn over the financial years 2014/2015 to 2017/2018 shows that the rate of infill and intensification has been increasing per annum. The redevelopment of existing residential land has increased from 15 dwellings in 2014/2015 to 75 dwellings in 2017/2018. These redevelopments have typically been on underdeveloped large land holdings within the existing urban area. These have been approved for more compact dwellings or a subdivision with community titles to permit a multi dwelling occupancy of new lots. The redevelopment of land generally correlates with the increasing growth within the Goulburn City.

Dwelling Approvals

Dwelling Type	Total Number of Dwellings / Lots		
	Goulburn	Marulan	Total
Detached Dwelling*	715	105	820
Dual Occupancy	90	0	90
Secondary Dwelling	24	8	32
Multi-Dwelling Housing	474	0	474
Subdivision	1279	82	1361

Data sourced from Council. *Includes large lot residential approvals

Large Lot Residential Demand

Large lot residential lots (also referred to as rural residential) are those lots that are not connected to both reticulated water and sewer.

The overall dwelling approval data has not been sensitised for the split between approvals on 1-2ha large lot residential lots, compared to approvals for serviced residential lots. However, a review of Council data suggests that there is reasonable demand for rural residential development on the fringe of the study area. Within the LGA, rural residential development is typically located in areas zoned R5 Large Lot Residential, RU6 Transition and E4 Environmental Living and with minimum lot sizes ranging from 2,000sqm to 10 hectares depending on zoning and minimum lot size.

For Goulburn, the majority of recent rural residential development has been on the western and south-western fringe. In the past decade, 290 lots have been created through subdivision of existing properties in this area. Of these, approximately 200 dwellings had been approved or had a development application submitted within 2 years of the subdivision being registered. This represents an approximate uptake of 70 per cent and demonstrates a consistent demand for larger blocks on the urban fringe.

Housing Supply

Goulburn and Marulan have residentially zoned land available for immediate needs, however, Goulburn is set to exhaust the supply of greenfield residential land within the next 2-5 years if current development trends continue. Both settlements have been analysed for their supply in regard to the current demographic and market trends.

A common misconception is that if land is zoned, vacant and undeveloped, then it is available for immediate development. In practice, this may not be the case. In fact, there is often a 'disconnect' between the amount of zoned land and actual delivery of housing lots.

Land that is rezoned for residential development may not necessarily be delivered to the market. This could be due to a variety of reasons, including planning constraints (e.g. statutory requirements, difficulties with infrastructure provision, fragmentation of ownership, etc.), capacity constraints (e.g. bushfire, flooding, slope and landslip, etc.) and commercial pressures. Each has the potential to severely impede the supply response to demand pressures.

The adequacy of land release is therefore crucial for the supply of housing. From first principles the supply of housing directly impacts the price of housing. A constrained supply of land will drive up landowner expectations making site assembly a high risk and high resource activity. Planning controls within the Goulburn Mulwaree Local Environmental Plan 2009 (GMLEP 2009) provide an opportunity for infill development for R1 General Residential and R2 Low Density Residential zoned land. Clause 4.1A of GM LEP 2009 allows an exception to the minimum lot size for the subdivision of land for a dwelling, either detached or semi-detached, to create a lot not less than 350sqm. The provision also allows subdivision to create five or more lots with an area of at least 300sqm. R1 and R2 land is the most common zoning of Goulburn, with a corresponding minimum lot size of 700sqm. While infill development is not expected to provide a substantial stream of future housing supply, it does present an opportunity to contain some growth within the existing urban footprint.

Large Lot Residential Supply

Based on the current data, 290 lots have been created in the R5 Large Lot Residential zone in the past ten years in Goulburn. Over this same period, approvals have been granted for 200 dwellings. This indicates that there are at least another 90 vacant lots in the R5 zone. Based on the historic conversion or take up rate (lots to approved dwellings) of 20 per annum, this would suggest around 4.5 years supply of large lots in Goulburn.

Marulan has a much more limited supply of R5 Large Lot Residential zoned land. Supply in Marulan has been driven by demand for standard, serviced residential land, rather than unserviced lots. The constraints to development in Marulan (discussed in more detail later in the Strategy) may contribute to the supply of this form of development.

Current and Planned Housing

As noted above, for the purposes of analysis, the housing demand has been assumed to be midway at 3,500 dwellings (195 dwellings per year assuming 18 years).

Based on the evidence, which includes stronger growth in Marulan than Goulburn and an assumption that at least a proportion of housing will be delivered in the form of large lot residential development on the urban fringe, the forecast demand scenario as to the distribution of the dwelling and land requirements is summarised in the following table.

Goulburn

Goulburn currently accommodates 13,739 dwellings.¹

The majority of subdivision and development for housing in Goulburn is occurring on existing zoned land in Goulburn at Marys Mount. This area is currently zoned R2 Low Density Residential with a 700sqm minimum lot size. The zoned land has been largely developed with around 91 ha remaining of undeveloped residential zoned land. Of this undeveloped land, approvals are in place for approximately 500 additional lots at Marys Mount. When developed for housing, this represents around two to five years of supply of dwellings.

Dwelling Assumptions

Area	No. Dwellings	% of total	Minimum Lot Size	Yield dwellings/ha	Land Requirement (ha)
Goulburn Infill	250	7%	-	12-20	-
Goulburn Serviced Residential	2,435	70%	700sqm	8.5	276
Goulburn Urban Fringe (large lot)	360	10%	1-2ha	0.35	1,029
Marulan*	355	10%	700sqm	8.5	53
Other Rural#	100	3%	-	-	-
Total	3,500	100%		-	1,358

*Marulan has experienced strong growth. There are a number of approvals in place that will yield up to 130 residential lots which is up to 6.5 years supply based on current trends.

#Assumption based on change over time.

At present, residentially zoned land is being developed at an average 8.5 dwellings per hectare. If this trend is continued Goulburn will require around 276 hectares of serviced residential land to meet the required demand by 2036.

Taking a conservative approach based on historic approvals data, coupled with the projected change in populations, the LGA will generate demand for an additional 170-195 dwellings per annum.

Goulburn is likely to provide the majority of these, historically around 70 per cent (up to 137 dwellings per annum) with the balance being provided in Marulan and limited amounts provided elsewhere throughout the LGA.

If an assumed 2,435 of the required 3500 dwellings are provided in Goulburn through greenfield development, approximately 276 hectares would be required.

An additional 250 dwellings could be provided through further urban infill and intensification. The assumption for infill is deliberately very low. Recent development approvals indicate a spike in

¹ ABS Community Profiles 2016.

housing approvals for multi dwellings housing with up to 36 percent being for residential accommodation other than single detached dwellings. However, this spike has not been reflective of the trend set by other years, and may be more reflective of a couple of larger infill developments which may not be likely to be replicated on yearly basis. However, should a trend develop on this basis, Goulburn could see between 360-700 dwellings delivered as multi-dwelling housing over the life of the Strategy in both greenfield and infill areas. Given the potential for fluctuation of demand and in trends for infill development, accurately monitoring dwelling approvals will be a key element of the implementation of the Strategy.

Marulan

It is expected that Marulan will continue to grow as projected. If an assumed 355 dwellings are required to meet the estimated demand, around **53 hectares** of residential zoned land is required. Marulan currently has around 20 hectares of undeveloped residential land. The land requirement for additional serviced land is **38 hectares** across the life of the Strategy to 2036.

Marulan will need to ensure that sufficient land is identified and preserved for future urban residential zoning. Council could consider rezoning this area with an Urban Release Area provision and concept plan that demonstrates the arrangement of larger lots (>2 ha) such that they can be efficiently re-subdivided in the medium/long term.

Given the constraints to development to the south and west and physical barrier created by the Hume Highway to the east, the land area to the north should be reserved for this purpose. Based on the positive growth experienced by the town over the past 10 years, it will be important to monitor the take-up of existing urban land. Should Marulan's growth accelerate the area in the north will provide sufficient land for future growth.

Constraints to Development

The Strategy includes assessment of residential development opportunities against constraints. The combined mapping highlights the constraints to development (refer **Figures A and B** Maps showing **Goulburn Constraints and Marulan Constraints** below). The maps sieve out that land that presents a challenge to development and in doing so identifies the land that is least constrained. It is these areas that have been priorities for urban development.

Biodiversity

The consideration and approach to biodiversity proved to be a challenge with conflicting data and limited scope to undertake property level vegetation assessments. The constraints mapping includes three biodiversity data layers; the High Environmental Value (HEV) land provided by the Office of Environment and Heritage (OEH), HEV data that has been validated by Ecological Australia Pty Ltd (ELA) in specific areas, and other vegetation which includes areas of known Threatened Ecological or Endangered Ecological Communities (TEC and EEC).

In some cases, the information available may be sufficient to rezone land, in others, further site-specific assessment and validation of HEV data will be required.

Other Constraints

The Strategy acknowledges built physical constraints to urban development. These constraints include infrastructure; gas pipeline, high voltage transmission lines, particular haulage routes, the Hume Highway, Goulburn aerodrome, abattoir and extractive industries. While the existence of these land uses does not in every case prohibit residential development from occurring nearby, they do all require a degree of consideration in any assessment process.

Site Suitability

Simply meeting the capability criteria, particularly for large lot residential development, does mean that the land is suitable for development. This is particularly the case for land immediately north of both Marulan and Goulburn, currently zoned RU6 Transition. These areas will be critical in the long term sustainability of urban growth and need to be protected from fragmentation as a priority. It is recommended that minimum lot sizes in these areas do not fall below 10 ha.

Figure A Goulburn Constraints

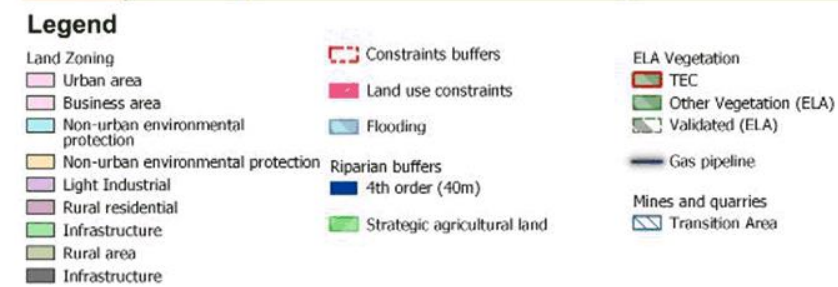
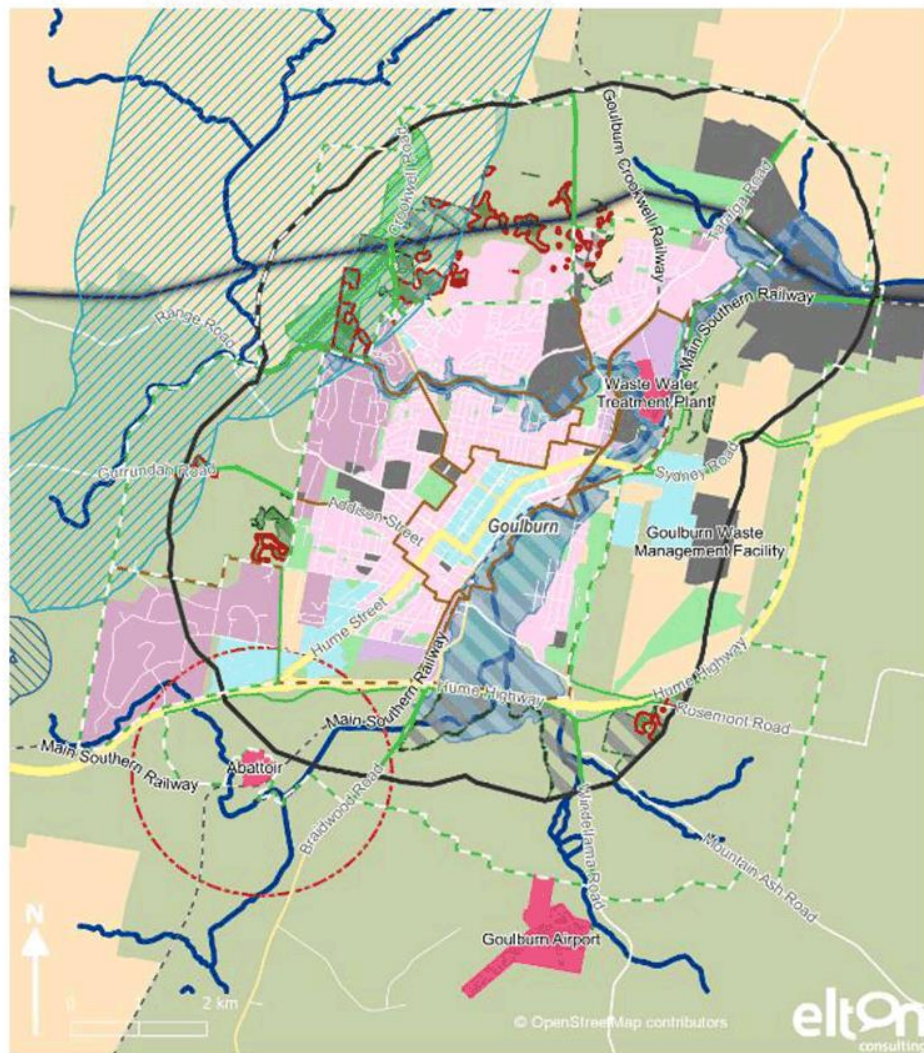
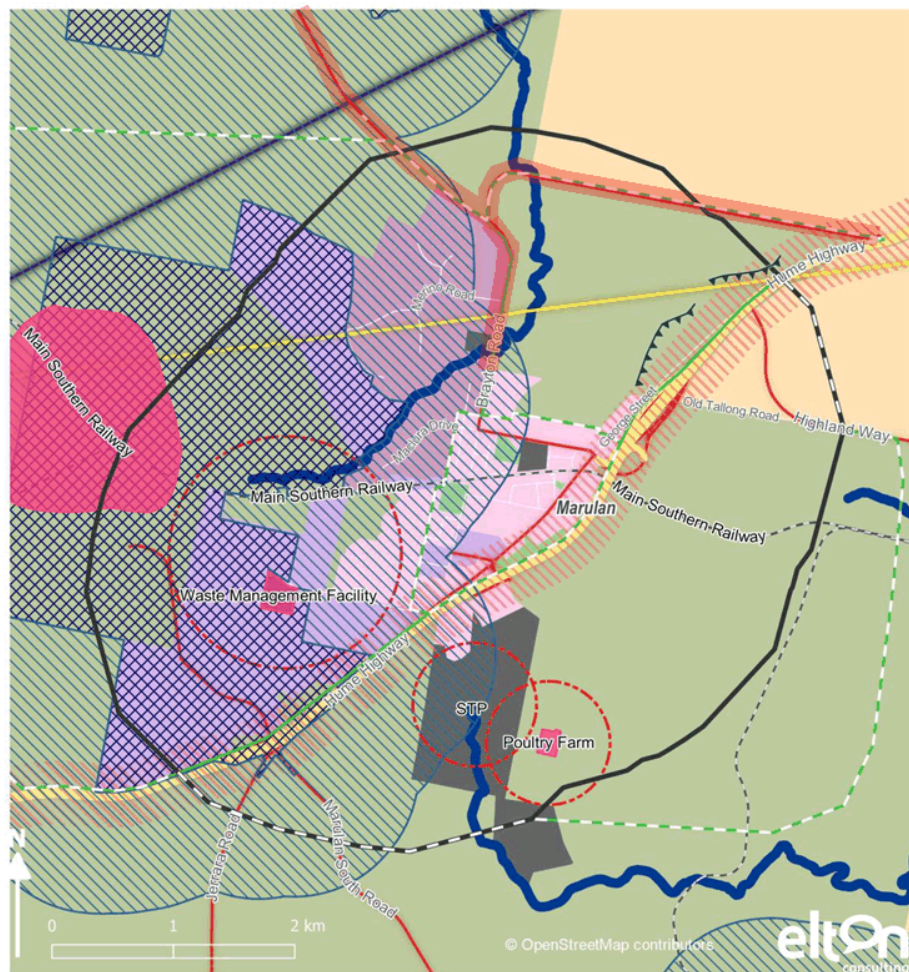


Figure B Marulan Constraints



Legend

- | | | |
|------------------------------------|-------------------------------|--------------------------|
| Land Zoning | Constraints buffers | Gas pipeline |
| Urban area | Land use constraints | Mines and quarries |
| Non-urban environmental protection | Riparian buffers | Transition Area |
| Urban area | 4th order (40m) | Ridge line |
| Rural residential | 250m from Hume Highway | Haulage route and buffer |
| Public Recreation | Electricity transmission line | |
| Rural area | | |
| Infrastructure | | |

Precinct Approach

In order to enable the consideration of both Goulburn and Marulan in sufficient detail, the study area has been divided into precincts (refer **Figures C & D**). Each precinct has been considered having regard to the existing planning controls and environmental and physical constraints to further development. This approach enabled the identification of the *opportunity areas* described above.

An objective based approach has been taken in determining the opportunity areas. The principles are largely constraints based and include environmental and servicing constraints, sequencing of development and maximising existing and future infrastructure. They also seek to complement and enhance elements of the existing settlements and physical locations.

The principles have also been applied to a number of sites historically identified by Council and individual land owners as sites that could be considered for more intensive residential development. These were the sites identified in the Site Assessment – Opportunity Sites (formerly **Appendix D**, now included in the Consultation Report under separate cover). This has been retained. Where specific submissions included comment in relation to this aspect of the Strategy, these have been addressed in the Consultation Report. In many instances, feedback during the exhibition process has also led to key inclusions or exclusions of opportunity areas in some precincts, for example around Gorman Road, Run 'O' Waters and North and South Marulan.

To ensure a sound evidence-based approach, the Strategy includes analysis of the demographic characteristics of the Local Government Area (LGA), housing demand and housing supply, again having regard to the land use planning policy framework in place. This analysis found that the LGA can expect a change in the structure of households, and importantly, that Council will need to provide for a range of different dwelling typologies to accommodate housing choice to assist older people downsizing and younger couples and families entering the housing market.

The existing planning controls in both the Local Environmental Plan (LEP) and Development Control Plan (DCP) have also been considered in the context of their operation and effectiveness in delivering appropriate housing and housing diversity, particularly in relation to multi-dwelling and infill development. While the LEP controls are sufficiently flexible, feedback from Council indicated more certainty is required about the location of higher density housing rather than the seemingly ad hoc approach facilitated by the current controls.

The location of multi-dwelling and higher density housing has been carefully considered. Opportunities for intensification of the existing urban area, within close proximity to the Goulburn City Centre and rail station was preferred. The most significant constraint to the redevelopment of land in this precinct is the Heritage Conservation Area. Incentives such as relaxing the car parking and open space standards may be required to encourage and facilitate greater development. While accessing public transport per se is not a major consideration, proximity to services, shopping and opportunity for social connectivity continues to be important.

The opportunities for development of the urban fringe have been based on the forecast yield apportioned between serviced and un-serviced land requirements. These assumptions are discussed in detail in the Evidence section of the Strategy.

Opportunities for Development

The key areas identified for growth area illustrated in **Figures C & D** and shown in the table below.

Additional Residential Land Goulburn - Serviced

Precinct	Area Identified (ha)	No. Dwellings/lots*	% total new dwellings	Years Supply
Serviced Residential Land				
1/2 Run 'O' Waters	199.13	1,693	44	12.4
4 Sooley	28.38	241	6	1.7
5 Middle Arm West	144.22	1,228	32	9
6 Middle Arm East	26.55	225	6	1.7
16 Bradfordville	13.1	111	3	0.8
7 Kenmore	38.3	326	9	2.4
Sub-Total	456.51	3,824	100	27.9
Urban Release Areas Long Term (beyond 2036)				
3 Baw Baw	110.6	940	27	6.9
5/6 Middle Arm	299.96	2,550	73	18.7
Sub-total	410.46	3,490	100	25.6
Total	869.97	7,368	-	53.7

*Based on single detached dwelling typology

Additional Residential Land Large Lots – Goulburn

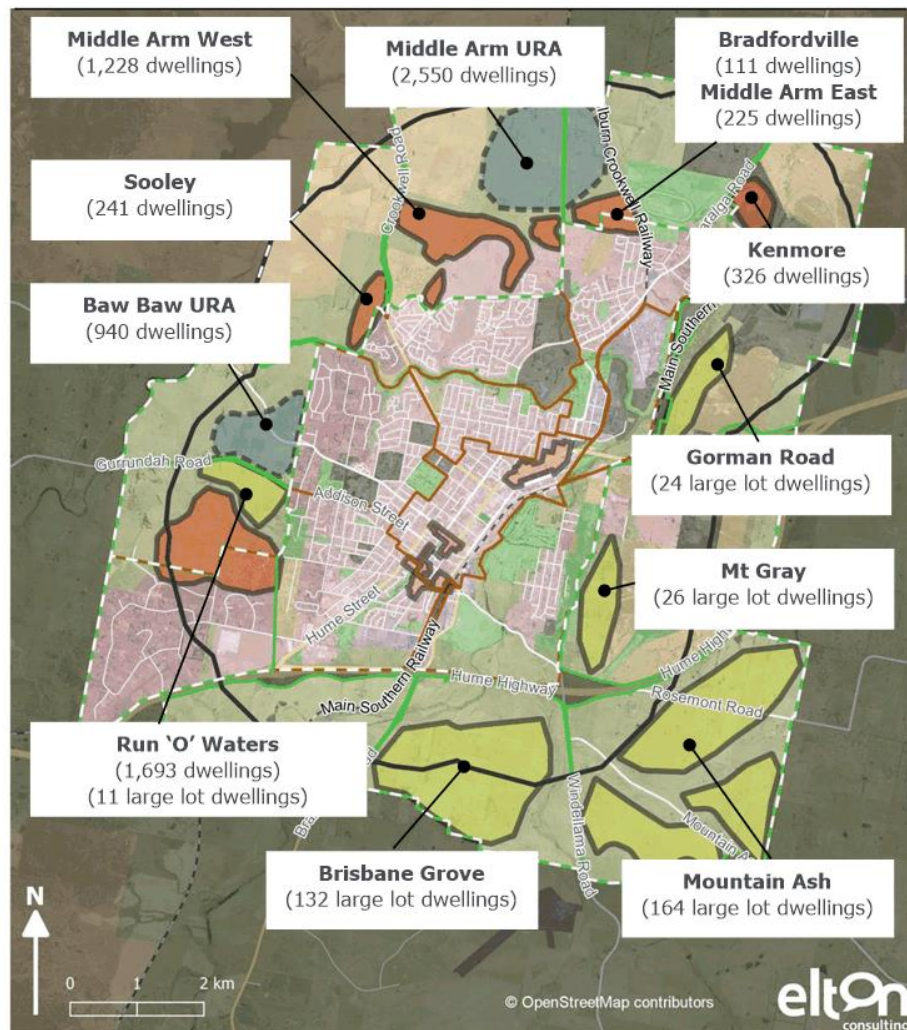
Precinct	Area Identified (ha)	No. Dwellings/lots^	% total new dwellings	Years Supply
Large Lot Residential				
2 Run 'o' Waters	50.5	11		0.6
There may be an opportunity to consider a smaller MLS 2000-4000 sqm should water and sewer infrastructure become available in the long term.				
8 Gorman Road	86.84	30	9	1.5
9 Mt Gray	72.89	26	7	1.3
10 Mountain Ash	467.45	164	47	8.2
11 Brisbane Grove	376.13	132	38	6.6
Total	1003.31	352	100	17.6

^based on MLS of 2ha. Lots may be larger which will impact yields

Additional Residential and Large Lots Marulan

Marulan	Area Identified (ha)	No. Dwellings/lots*	% total new dwellings	Years Supply
Serviced Residential				
3 Marulan North	86.81	694	96	35
Consider staged approach, rezone with an Urban Release Area and Concept Plan to deliver 2ha lots in the short term and re-subdivide in the future				
Urban Release Areas Long Term (beyond 2036)				
3 Marulan North	74.26	631	100	32

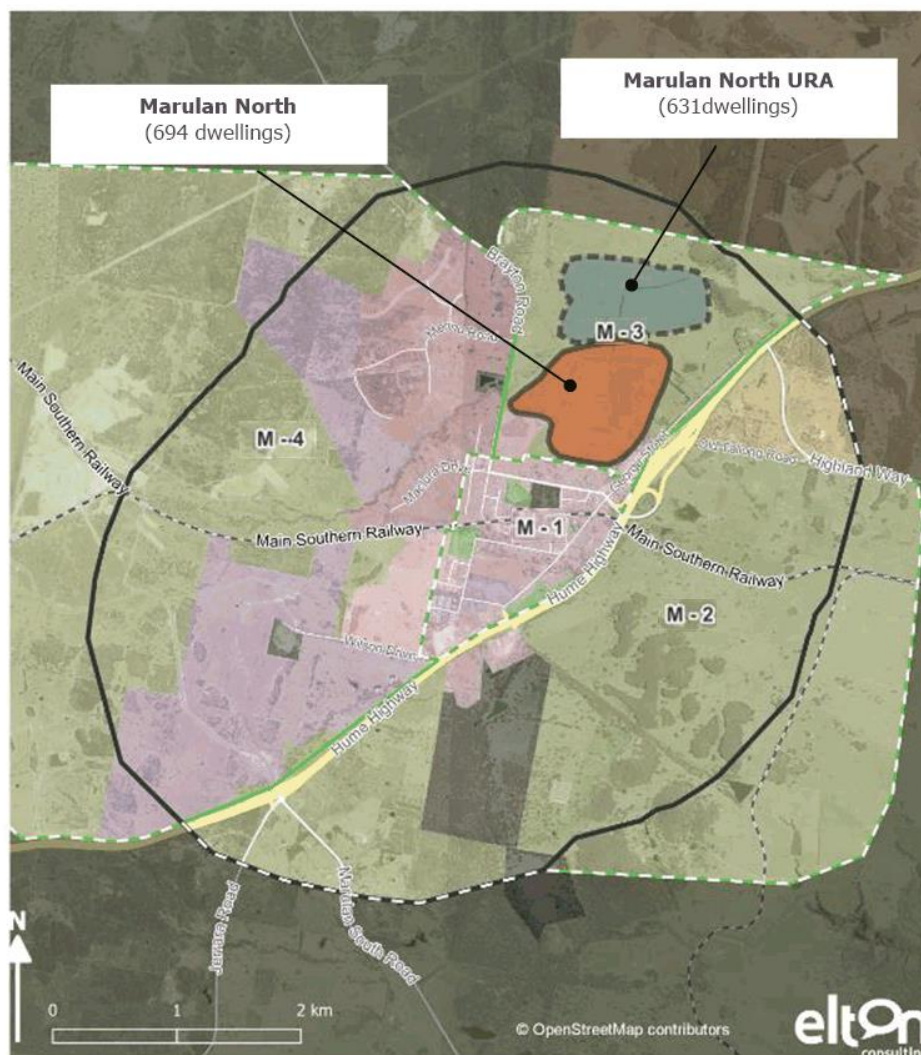
Figure C Precincts and Opportunities for Development - Goulburn



Legend

Precincts	G - 1 Run 'O' Waters (existing)	G - 9 Mt Gray	G - 17 Eastgrove
Urban	G - 2 Run 'O' Waters (rural north)	G - 10 Mountain Ash	G - 18 Central Goulburn
Fringe	G - 3 Baw Baw	G - 11 Brisbane Grove	G - 19 Ifield
Opportunity area	G - 4 Sooley	G - 12 Abattoir	G - 20 Correctional Centre
Serviced Urban Residential	G - 5 Middle Arm West	G - 13 Garfield	
Large Lot Residential	G - 6 Middle Arm East	G - 14 West Victoria Park	
Urban Release Area Long Term	G - 7 Kenmore	G - 15 Marys Mount	
Existing Residential Zone	G - 8 Gorman Rd	G - 16 Bradfordville	

Figure D Precincts and Opportunities for Development - Marulan



Legend

Opportunity area	
Serviced Urban Residential	M - 1 Marulan Town Centre
Urban Release Area Long Term	M - 2 Marulan East
Existing Residential Zone	M - 3 Marulan North
	M - 4 Marulan West

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Draft Urban and Fringe Housing Strategy

Section 1 - Introduction

1 Introduction

The Urban and Fringe Housing Strategy (Strategy) has been prepared in response to residential land pressure from sustained population growth in the Goulburn Mulwaree Local Government Area (LGA) and an increasing shortage of available, zoned residential land, particularly in the City of Goulburn.

The objective of the Strategy is to identify the future housing needs for Goulburn and Marulan to 2036 and provide recommendations to guide land use decisions and local policy. Fundamental to this Strategy is the need to identify land which is potentially suitable for **urban residential use** in both the short to long term, to ensure the preservation of this area for the future orderly growth of Goulburn and Marulan to occur.

The Strategy has been developed in two phases with the first phase being the initial community and stakeholder engagement undertaken by Goulburn Mulwaree Council (Council) in April and May 2018, and the second phase being the revision following public exhibition of the Draft Strategy. The first phase of the project established the issues and tested these with stakeholders and the community. This built on the vision of the LGA adopted in the Regional Community Plan to:



To build and maintain sustainable communities while retaining the region's natural beauty.²

The Strategy has been developed having regard to the direction provided in the South East and Tablelands Regional Plan 2036 and the draft Housing Strategy Guidelines prepared by the Department of Planning and Environment (now the NSW Department of Planning, Industry and Environment). The Strategy will guide land use and planning decisions and inform amendments to the Goulburn Local Environmental Plan in the immediate and medium term.

The document is structured into four sections as follows:

Section 1 – Introduction – examines the planning framework in which the Strategy needs to be considered, the general characteristics and of the area and establishes a long term housing vision for the area.

Section 2 – The Evidence – comprises an overview and analysis of demographic, housing and affordability statistics to establish the local context and housing needs.

Section 3 – Precinct Constraints and Opportunities – This section identifies the key constraints to development and opportunities at a precinct level.

Section 4 – The Priorities – outlines an integrated picture of the current LGA, the desired future and roadmap to achieve this.

Section 5 – Actions – implementation and delivery of the Strategy along with timeframes for monitoring and review.

² The Tablelands Regional Community Strategy Plan 2016-2036.

1.1 Process and Consultation

The Strategy has been developed over a number of stages as illustrated below. The initial consultation was undertaken by Council in early 2018. A Draft Strategy was developed and subsequently endorsed for public exhibition in late 2018. This Strategy has been amended following the community and agency feedback. A Consultation Report has been prepared including a summary of the submissions received during the exhibition (refer **Consultation Report** under separate cover).

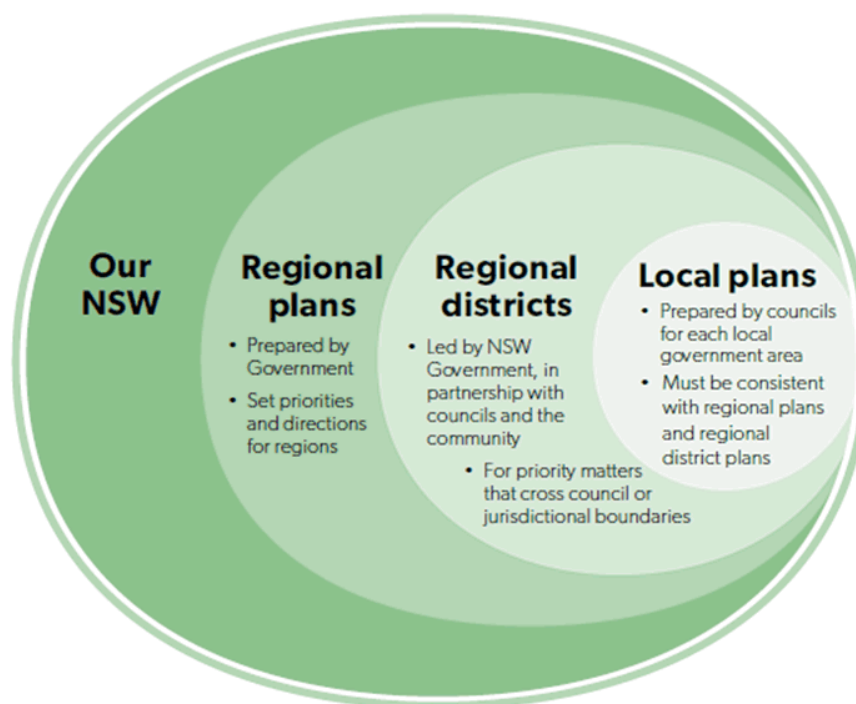
The steps in the preparation of the Strategy have been as follows:



1.2 Planning Policy and Context

In planning for growth in the Goulburn Mulwaree LGA it is important to understand the strategic policy and planning framework that applies to the area. This framework is set primarily by the NSW Government and the Goulburn Mulwaree Council (Council). The planning policy framework is illustrated as follows:

Figure 1 State Planning Hierarchy



Source: South East and Tablelands Regional Plan 2036.

The strategic policy and land use planning framework of the ACT Government is also important to understand given the proximity of Goulburn Mulwaree to Canberra and the influence the latter has on the local economy.

In the context of the planning hierarchy, Council has a role in leading local strategic planning. This includes:

- » Development of Local Strategic Planning Statements
- » Local Housing Strategies
- » Local Environmental Plans
- » Town Centre and Precinct Plans
- » Development Control Plans

The Local Strategic Planning Statements, in particular, will complete the strategic planning hierarchy and will set out the land use vision, priorities and actions for the local area.

While the focus of the Urban and Fringe Housing Strategy is on delivering land for housing, it will be necessary to integrate planning for housing with broader local planning for infrastructure, employment and open space provision.

1.2.1 Ministerial Directions

Section 9.1 of the *Environmental Planning and Assessment Act 1979* (EP&A Act) provides that any direction of the Minister is to be taken into account in the preparation of a planning proposal. As

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the Strategy will make recommendations to inform a Planning Proposal to rezone land for urban development, the Strategy has been prepared having regard to the relevant Directions. The relevant Directions are listed in the table below. An overview of these is provided in **Appendix A**.

Table 1 Ministerial Directions

Direction	Application to the Strategy/Planning Proposal
Employment and resources	
Direction 1.1 Business and Industrial Zones	Applies to certain land in Marulan that is currently zoned Industrial and recommended to be included in the Residential zone and to land identified in Goulburn by the <i>Employment Lands Strategy</i> to be rezoned from Enterprise Corridor to Residential.
Direction 1.2 Rural zones	Applies to all rural land zoned rural and being considered for urban purposes
Direction 1.3 Mining, petroleum production and extractive industries	Particularly relevant in Marulan
Direction 1.5 Rural lands	Applies to all land that is rural or environmental protection and being considered for urban purposes. Highlights the need to consider constraints.
Environment and heritage	
Direction 2.1 Environment Protection Zones	Applies to all environmentally sensitive areas
Direction 2.3 Heritage conservation	Applies to all land. Need to consider heritage.
Housing, infrastructure and urban development	
Direction 3.1 Residential zones	Key direction for consideration. Objectives include housing choice, efficient use of infrastructure, minimise impact of residential development of land resources.
Direction 3.4 Integrating Land Use and Transport	Applies to any proposal that relates to residential land.
Direction 3.6 Shooting Ranges	Applies to land adjacent /adjoining the Goulburn Rifle Range.
Hazard and risk	
Direction 4.3 Flood prone land	Any development of flood prone land needs to be consistent with NSW Flood Prone Land Policy.
Direction 4.4 Planning for bushfire protection	To discourage development in bushfire prone areas. Note that all of the non-urban area of Goulburn and Marulan is Bush Fire Prone.

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Direction	Application to the Strategy/Planning Proposal
Regional Planning³	
Direction 5.2 Sydney Drinking Water Catchments	Protect Sydney Drinking Water Catchment.
Direction 5.10 Implementation of Regional Plans	Consistency with the South East and Tablelands Regional Plan.

Consideration of Ministerial Directions

The Ministerial Directions will need to be fully addressed in any Planning Proposal. The Strategy provides the evidence and analysis to enable the identification of land suitable for future residential development.

1.2.2 State Environmental Planning Policies

A number of State Environmental Planning Policies (SEPPs) need to be considered in the context of delivering housing. Generally, these policies will form part of the statutory consideration of specific development applications.

The most relevant SEPPs are highlighted in the following table with more detail provided in **Appendix A**.

Table 2 State Environmental Planning Policies

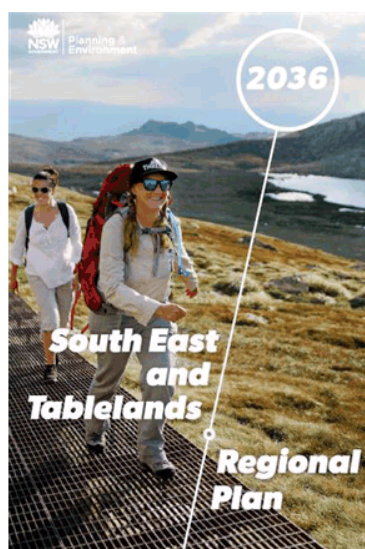
SEPP	Implication for the Strategy
Exempt and Complying Development Codes SEPP Inland Code Greenfield Housing Code Medium Density Housing Code	Referred to as the Codes SEPP, this policy allows for certain development, in particular circumstances to be undertaken without a development application from Council. This includes single dwellings, dual occupancy and multi-dwelling housing. This means that Council has little influence in terms of the design, setback, material and landscaping elements of development. It highlights the need for clear and precise DCPs and structure plans for Urban Release Areas so that elements such as street width, footpaths and street trees, open space networks and linkages, community facilities and water and sewer infrastructure can all be considered and resolved prior to any residential development occurring in an area.
Sydney Drinking Water Catchment 2011	All of the land being considered on the Urban Fringe of Goulburn and Marulan is in the Sydney Drinking Water Catchment (SDWC). The SEPP requires new development to have a neutral or beneficial effect (NorBE) on water quality. This represents a key environmental constraint to the expansion of land for residential development where the site would be reliant on on-site waste treatment. The importance of this policy is highlighted by the renewed focus on the suitability of delivering more large lot residential development.

³ Direction 5.1 Implementation of Regional Strategies was revoked on 17 October 2019 and has since been removed from this Strategy.

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SEPP	Implication for the Strategy
	This SEPP relates to Direction 5.2 Sydney Drinking Water Catchment (noted above).
Affordable Housing (SEPP 70)	The policy identifies the need for affordable housing within each area of the State. The SEPP allows for Councils to include affordable housing contribution schemes and amend their local environmental plans to reference the schemes. Given the concerns about access to affordable housing in the LGA, Council should consider how this SEPP could be applied in the LGA.
Affordable Rental Housing	The policy provides incentives for the delivery of affordable rental housing as part of a development proposal.
Primary Production and Rural Development	Focused of the identification and protection of land for agriculture, including State significant agricultural land. The Strategy needs to consider the impact on existing and potential agricultural uses of land when rezoning for urban purposes.

1.2.3 South East and Tablelands Regional Plan 2036



The South East and Tablelands Regional Plan, came into force in July 2017 outlines a 20-year vision to build sustainable communities by balancing opportunities for new homes and jobs with the protection of the region's natural environment.

The Plan covers the council areas of Goulburn-Mulwaree, Wingecarribee, Eurobodalla, Bega Valley, Snowy Monaro, Queanbeyan-Palerang, Yass Valley, Hilltops and Upper Lachlan.

The overarching visions for the Plan is: *A borderless region in Australia's most geographically diverse natural environment with the nation's capital at its heart.*

As the region's 'heart', the ACT plays a significant role as both the primary driver of growth and the provider of employment and higher order services, just one hour south of Goulburn.

The Plan anticipates that 45,450 additional people are expected to populate the region by 2036, the majority of

who will live within commuting distance of Canberra and/or Sydney. As Goulburn is a commutable distance to either Canberra or Sydney it is likely to accommodate considerable population growth to 2036.

Planning Principles in the Regional Plan

The Plan presents a planning framework that is founded on the following principles:

- » facilitate economic growth, environmental management and social wellbeing

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- » respond to the region's landscape, environmental assets, natural and cultural resources, mineral and energy resources (including renewable energy)
- » respond to long term structural economic and demographic changes, with a focus on aging, migration patterns and productivity
- » recognise the implications of a changing climate and build resilience to natural hazards
- » guide the locations for new housing and provide greater housing choice
- » encourage economic activities, consistent with changing market demands and industry needs
- » inform infrastructure and services investment, and coordinate with land use
- » integrate cross-border drivers of change and coordinate responses state-wide and nationally.

The Key Priorities outlined in the Local Government Narrative for Goulburn-Mulwaree identified in the Plan (Pg. 61) related to the delivery of housing are:

- » diversify the housing market to respond to demographic change and pre-empt housing affordability pressures
- » promote successful adaptive heritage re-use opportunities and conserve the area's unique built heritage
- » encourage design innovation and quality outcomes to complement the natural and built heritage with modern architecture.

There are four goals in the Plan aimed at achieving the vision of building resilient and sustainable communities by balancing growth opportunities with protecting the region's diverse environment and lifestyles. The goals are supported by a number of directions and actions. The goals are as follows:

Goal 1: A connected and prosperous economy

Goal 2: A diverse environment interconnected by biodiversity corridors

Goal 3: Healthy and connected communities

Goal 4: Environmentally sustainable housing choices.

The key directions and actions under each of these goals have been considered in the development of the Strategy to the extent that they provide the broad policy direction for the strategies and actions identified in the Housing Strategy in **Section 4**. A detailed summary of the directions and actions that relate to the Strategy, how they have been considered in terms of actions in the Strategy and the outcome or implementation measure is expressed in a table in **Appendix B**.



Having a ready supply of well-located land for residential development will create downward pressure on house prices, maximise the use of existing infrastructure and protect environmentally sensitive areas.

Local housing strategies prepared by councils are the first step in identifying housing needs and planning for a range of housing types. These strategies enable communities to assess the broader implications and consequences of identifying locations for proposed new housing. They also help identify the infrastructure needed to support local communities.

Local housing strategies need to consider community aspirations. They must be flexible and responsive to shifts in local housing markets for both greenfield and infill developments, and deal with unforeseen constraints, including uneven rates of development or unexpected population growth.

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These strategies should plan for a range of housing choices, including retirement villages, nursing homes and opportunities to modify existing dwellings to enable people to stay in their homes as they age.

The strategies should be consistent with Settlement Planning Principles that align with the Memorandum of Understanding between the NSW and ACT Governments. These will be complemented by guidelines for local housing strategies that will assist councils when undertaking local strategic planning.

NSW Government, *South East and Tablelands Regional Plan 2036*



The Plan also outlines settlement planning principles and neighbourhood planning principles (overleaf) which have informed the development of the Housing Strategy.

Settlement Planning Principles

Local housing strategies focus on urban areas where residents can access services, jobs and transport. Some strategies will need to acknowledge connections to Canberra as a location for higher-order services and employment.

Decisions around the most suitable locations for new housing must consider the compatibility of land uses, as well as the availability of road connections and service infrastructure. Other considerations include:

- » avoiding or mitigating the impacts of hazards, including the implications of climate change;
- » protecting areas with high environmental value and/or cultural heritage value and important biodiversity corridors;
- » identifying a sustainable water supply;
- » protecting the region's water supply and the environmental qualities of rivers and streams;
- » considering the impact of aircraft noise;
- » protecting areas that contain important resources and minimising the potential for land use conflict;
- » protecting important agricultural land to capitalise on its potential to produce food and fibre now and in the future; and
- » identifying and designing new neighbourhoods so they are environmentally sustainable, socially inclusive, easy to get to, healthy and safe.

Source: NSW Government, *South East and Tablelands Regional Plan 2036*, July 2017

Neighbourhood Planning Principles

The Neighbourhood Planning Principles provide overarching principles that may apply to new developments in both greenfield and existing urban areas. The application of the principles may apply more strongly depending on the context of the proposed development.

- » public transport networks that link frequent buses into the rail system
- » a range of land uses to provide the right mix of houses, jobs, open space, recreational space and green space
- » easy access to major town centres with a full range of shops, recreational facilities and services along with smaller village centres and neighbourhood shops
- » jobs available locally and regionally, reducing the demand for transport services
- » streets and suburbs planned so that residents can walk to shops for their daily needs
- » a wide range of housing choices to provide for different needs and different incomes. Traditional houses on individual blocks will be available along with smaller, lower maintenance homes, units and terraces for older people and young singles or couples
- » housing diversity can be facilitated by providing a number of purpose-designed smaller lots and dwellings
- » new housing developments are to provide a proportion of adaptable housing to further increase housing choice across the region to cater for the ever-changing needs of its residents
- » conservation lands in and around the development sites, to help protect biodiversity and provide open space for recreation
- » minimise the negative impacts on the natural water cycle and protect the health of aquatic systems, for example, through Water Sensitive Urban Design principles.

Source: NSW Government. South East and Tablelands Regional Plan 2036. July 2017

1.2.4 Department of Primary Industries Policies (DPI)

A number of DPI policies are relevant considerations in the preparation of this Strategy, particularly in the fringe areas of Goulburn and Marulan, as they consider land use conflict, agricultural land use protection and sustainability of agriculture.

Maintaining land for agricultural industries

This DPI policy was developed to provide certainty and security for agricultural enterprises over the long term, and guidance to planning authorities and communities in developing and implementing environmental planning instruments. The Policy has been taken into consideration in the development of this Strategy as it will impact rural communities in the Goulburn-Mulwaree LGA and inform the future Planning Proposal to change the LEP.

Key elements are:

- » Preserving the best productive land
 - > land with the best combination of soil, climate, topography and water for agricultural production is a limited resource in New South Wales and should be maintained for future generations
- » Minimising land use conflict

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- > agricultural land should not be alienated directly through lands being used for non-agricultural purposes and indirectly by incompatible developments on adjacent land restricting routine agricultural practices
- » Maintaining and improving the economic viability of agricultural operations
- > agricultural industries are a fundamental asset to the state of NSW as they provide a long term means of providing employment, raw materials and fresh safe secure food while supporting regional communities

The Policy notes that once land is converted to other uses it is unlikely to return to agricultural production, particularly once converted to residential or industrial uses. Therefore, the long-term costs and benefits (i.e. triple bottom line or people, planet, profit assessment) need to be evaluated during strategic planning, including open and informed consultation with the community.

NSW Right to Farm Policy

In 2015 the NSW Government adopted the *Right to Farm Policy*. The policy is supported by the Regional Plan and has been given effect by the PPRD SEPP and amended Ministerial Directions outlined above. It outlines the need to ensure that adjoining land users recognise the legitimate right of farmers to carry out agricultural practices.

The policy highlights the importance of planning for agricultural industry development and maintain access to agricultural resources including land. It emphasises the need for appropriate zoning and permissible land uses that are compatible with agricultural activities and supports local strategies that guide land use and minimise conflict.

The Right to Farm policy brings together a collection of actions including:

- » reinforcing rights and responsibilities
- » establishing a baseline and ongoing monitoring and evaluation of land use conflicts
- » strengthening land use planning
- » ensuring ongoing reviews of relevant environmental planning instruments include consideration of options to ensure best land use outcomes and to minimise conflicts
- » improving education and awareness on management of land use conflicts
- » considering potential future legislative options, should additional Government intervention be required.

1.2.5 Council Strategies and Plans

Regional Community Strategic Plan

The *Tablelands Regional Community Strategic Plan 2016-2036* is a joint plan between Goulburn Mulwaree, Yass Valley and Upper Lachlan Local Government areas. The plan recognises the synergies between the three LGAs and synthesises the priorities and expectations for the community to 2036.

The plan focuses on the relationship with and proximity to Canberra and the opportunities that improvements in transport infrastructure in particular, will provide to the region as a whole. While not including specific strategic priorities for housing, the focus on employment and strengthening economic development support the need to ensure that the towns and villages are able to respond to the continued population growth in the region.

The plan also aims to focus development in and around existing regional centres and towns to create vibrant and attractive places for residents to live and work, and to develop new communities in release areas, supported by infrastructure and services reinforcing Goulburn and Marulan in regional the hierarchy.

Goulburn Mulwaree Settlement Strategy 2020

The *Goulburn Mulwaree Settlement Strategy 2020* was prepared by Parsons Brinkerhoff and adopted by Council in 2006. The objective of the Strategy was to promote sustainable management of the newly amalgamated Local Government Area (LGA) and guide land use decisions to 2020.

The Strategy also facilitated the conversion of the former Local Environmental Plans into a single Comprehensive LEP consistent with the Standard Instrument LEP Order. In addition to the LEP, the Strategy informed the content and structure of the Development Control Plan.

In terms of residential development, the Strategy made the following observations:

Areas within Goulburn, including Marys Mount, Ducks Lane and Run 'O' Waters provide appropriate locations for future development with areas north of Ducks Lane presenting potential for further expansion for low density residential development. However these areas are limited by the capacity and availability of infrastructure to appropriately service new development. Heritage and the retention of key items also need to be considered as part of the overall planning for the City.

Potential for low scale residential uses is also available north of the existing town centre of Marulan along Brayton Road this has been identified as a R5 Large Lot Residential Zone with RU6 Transition areas being identified for future development opportunities dependent on land supply within the existing town boundary. Identifying a moderate level of new residential land would minimise potential for industrial lands to locate in this area and avoid land use conflict between inconsistent land uses. Also, potential for further expansion has also been identified along Wilson Drive Marulan. This area would present a sensible extension of the existing village for industrial purposes providing employment opportunities for Marulan. This is considered an appropriate outcome given the approve Lynwood Hard Rock Quarry and proposed expansion of mining operations in South Marulan.

It is important to note that these areas would be able to be serviced and provide an appropriate expansion of the existing residential areas. These areas would supply the bulk of the residential land demands to support incoming residents to 2020.

Source: Extract from Goulburn Mulwaree 2020 Parsons Brinkerhoff 2006, p259

The principles adopted for urban expansion in 2006 included the following:

Urban expansion principles

To achieve well-located new development areas, the following principles have been considered:

- *Assessment of land suitability* – based on an assessment of all existing and potential land uses.
- *Minimise land use conflicts* – locating growth which minimises conflicts that would affect the current and future viability of other land uses, such as mining, agriculture, industry, forestry and tourism.
- *Impacts on sustainable agriculture* – locate development areas where this will minimise increases in agricultural land values or incrementally reduce the lot size of prime agricultural lands.
- *Land capability* – locate development areas on land generally free of hazards such as flooding, contamination, erosion, subsidence, or land slip. Avoid areas susceptible to salinity, such as land with a high water table, or land subject to waterlogging.
- *Access to water resources* – consider adequacy of water supply and locate large lot residential development where on-site effluent disposal would not lead to pollution of waterways or degradation of soil and vegetation.
- *Biodiversity* – locate development areas where they would not endanger threatened species or critical habitat and minimise modification to natural ecosystems, habitat loss and fragmentation.
- *Create liveable communities* – locate residential development where people want to live including convenient access to facilities and services having regard to the existing settlement pattern, efficient service provision, road access and the protection of cultural and rural heritage.
- *Existing infrastructure* – locate development areas which complement the capacity of the existing road network, and the ease with which utility services can be provided.
- *Community wellbeing* – locate development areas near social infrastructure
- *Water quality* – ensure new development areas can achieve a neutral or beneficial effect on water quality.

Source: Extract from Goulburn Mulwaree 2020 Parsons Brinkerhoff 2006, p260

The work undertaken by Parsons Brinkerhoff informed the Local Environmental Plan and a significant area zoned for urban purposes as a result has now been fully developed. The planning assumptions made in 2006 remain consistent with the objectives discussed in the Strategy in **Section 2**.

Employment Lands Strategy 2016

Employment Lands Strategy 2016, identifies rural industries in Section 5.2.6 and Meat Processing in Section 5.2.7 as being a significant sector to the economy of NSW particularly in relation to wool and livestock for slaughter. The Strategy states:

“The rural industry in Goulburn Mulwaree LGA requires land for industrial uses including processing and packaging facilities; storage facilities and distribution facilities. The biggest rural industries in the LGA are not of a scale to require significant additional processing facilities but may have some needs that can be met by working closely with the industry. The most significant rural industry within Goulburn Mulwaree which requires employment lands is meat processing”

Key Strategy recommendations for **Goulburn** are outlined for each precinct as follows.

Opportunities for **Goulburn Town Centre**:

- » Economic growth across the LGA which could increase demand for retail and business services in Goulburn CBD;
- » Reviewing the current planning controls/urban design to enhance the appearance/built form of the CBD whilst providing opportunity for new development;
- » Encouraging the conservation of heritage buildings and sympathetic surrounding development; and
- » Redeveloping upper floors and vacant and underutilised sites within the CBD.

The **South Goulburn Enterprise Corridor Precinct** encompasses:

- > Ducks Lane Enterprise Corridor Sub-Precinct
- > Lockyer Street/Sowerby Street Enterprise Corridor Sub-Precinct
- > Hume Street Bulky Goods Enterprise Corridor Sub-Precinct
- > Robinson Street Enterprise Corridor Sub-Precinct

Opportunities identified for the **South Goulburn Enterprise Corridor Precinct** are:

- » Localised improvements to the Ducks Lane/Hume Street intersection should be considered to improve heavy vehicle access;
- » Extension of Lockyer Street to Tait Crescent to provide improved access and connectivity;
- » Increasing the number of bulky goods retailing along Hume Street (although may draw shoppers from CBD);
- » The rezoning of the previously owned Council east of the cul-de-sac at the end of Lockyer Street will provide additional enterprise land; and
- » The north of the sub-precinct includes a caravan park which may form a long term supply for enterprise uses if required.

The **North East Goulburn Enterprise Corridor Precinct** encompasses:

- > North Common Street Enterprise Corridor Sub-Precinct
- > Hetherington Street Enterprise Corridor Sub-Precinct
- > Sydney Road Enterprise Corridor Sub-Precinct

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- > South Common Street Enterprise Corridor Sub-Precinct

Opportunities identified for the **North East Goulburn Enterprise Corridor Precinct** are:

- » Given the constraints and existing land uses, consideration could be given to a change in land use in parts of the precinct; and
- » Investigate opportunities to improve access within the precinct.

The **South Goulburn Industrial Precinct** encompasses:

- > Tait Crescent Industrial Sub-Precinct
- > Sale Yards Industrial Sub-Precinct
- > Rail Yards Industrial Sub-Precinct

Opportunities identified for the **South Goulburn Industrial Precinct** are:

- » Undertake investigation on the appropriateness of extending Tait Crescent and the rezoning of the land to the south of Tait Crescent to facilitate subdivision and use of the lots for more general employment land;
- » South of Tait Crescent is a large parcel of land zoned rural which could potentially be utilised for Enterprise/Industrial land if access was provided. The expansion of this precinct should be considered in conjunction with the Lockyer Street Enterprise Corridor Sub-Precinct;
- » Re-use saleyards and wool stores for a more intensive employment use subject to remediation, planning and development of the site. This would increase the area of available land for industrial uses;
- » Proximity of the Sale Yards Industrial Sub-Precinct to the Goulburn Rail Freight Facility;
- » Potential land to the south of the Sale Yards Industrial Sub-Precinct which could be explored for industrial uses;
- » Given the size of the lots at the southern end of the Rail Yards Industrial Sub-Precinct there is potential to develop land to accommodate uses and/or to utilise spare capacity within larger lots; and
- » Within the Rail Yards Industrial Sub-Precinct there are further opportunities to redevelop some existing dwellings or underutilised lots for industrial uses including to the north of Bungonia Road and the residential lands located at the intersection of Braidwood and Bungonia Roads.

Opportunities identified for the **North Goulburn Industrial Precinct** are:

- » Considering the current level of existing activity, the precinct is suitable for industrial uses/urban support services and it will most likely grow through expansion of existing uses in response to population growth within Goulburn Mulwaree.

Opportunities for the **Bradfordville Industrial Estate Precinct** are:

- » The development of a medical centre on Ross Street has led to a proposal to develop a health hub within this sub-precinct on a large lot. It is assumed that the proposal is in response to an underlying demand within Goulburn for health related services. Rezoning would be required to facilitate the intent to provide a private hospital.

Murrays Flat Industrial Precinct

- » Longer term once Council's site is available for redevelopment; and
- » Investigate improvements to access into and out of the North East Goulburn Enterprise Corridor Precinct and the Murrays Flat Precinct onto Hume Highway.

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Abattoir Precinct

The Strategy notes that a number of areas across the LGA are considered suppliers of employment land, however these sit outside Industrial or Enterprise Corridor zones. The Abattoir Precinct has been specifically considered in light of supporting existing rural industry and recognising potential growth. In addition, this specific Precinct has been recognised for industries of a similar nature.

Key Strategy recommendations for **Marulan** are as follows:

- » Rezone the area along George Street north of the Railway Bridge to the end of Marulan from B2 Local Centre to B6 Enterprise Corridor
- » Rezone Thoroughfare and Austin Streets from B2 Local Centre to R1 General Residential to reflect the existing land use
- » Review the types of residential land use that should be permissible in the B2 Local Centre and controls such as the minimum amount of commercial floor area in the Development Control Plan for Marulan
- » Identify opportunities to work with local businesses such as the quarries for ongoing improvements to the town centre, including access for heavy vehicles

Opportunities for the **Marulan Enterprise Corridor Precinct** are:

- » Opportunities for new enterprise businesses (light industrial, office, business) which will have good access to the Hume Highway.

Opportunities for **Marulan Town Centre** are:

- » Economic growth in the local region which could increase demand for retail and business services;
- » Development of a vision for the future of the centre; and
- » Investigation of alternative transport routes for trucks to minimise travelling through the town centre.

The **Marulan Industrial Precinct** encompasses:

- > Portland Avenue/Wilson Drive Industrial Sub-Precinct
- > West Marulan Industrial Sub-Precinct
- > Suffolk Road Industrial Sub-Precinct
- > South Marulan Industrial Precinct

Opportunities for the **Marulan Industrial Precinct** are:

- » Investigate the potential to obtain alternate access to the Hume Highway through private land; and
- » Increase in support industries with the expansion of the quarries utilising vacant industrial lots.

Draft Recreational Needs Strategy (2019)

The *Draft Recreational Needs Strategy* identifies a shortfall in provision of open space in the newer areas of Goulburn around Marys Mount. It recommends new statutory planning provisions to address the shortage of parks. Key findings and recommendations of the Recreational Needs Strategy will need to be considered in the context of the release of additional land, particularly on the urban fringe of Goulburn, for urban development.

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The identification of open space needs to be part of the master planning process and DCPs for Urban Release Areas. As part of this process, Council will need to consider the mechanism for delivery of open space and other essential services and infrastructure.

Climate Change Risk Management Plan (2009)

Council is in the process of reviewing the *Climate Change Risk Management Plan*. The impact of climate change on the delivery of housing needs to be considered at the DCP stage so that measures to mitigate impacts such as increased temperatures can be incorporated. For example, inclusion of street and lot orientation, vegetation and landscaping to reduce the urban heat bank, sustainability inclusions such as materials, energy reduction measures and targets for carbon emission should all form part of the approach to addressing climate change.

Draft Social Sustainability Strategy and Action Plan 2019

The Draft Social Sustainability and Action Plan was publicly exhibited from December 2019 to January 2020. Social Sustainability has a direct influence on the liveability of communities and is a key factor in designing and planning for both new housing and the redevelopment of existing urban areas. Once completed it will need to be taken into consideration when preparing Planning Proposals in the LGA.

1.2.6 Goulburn Mulwaree Local Environmental Plan 2009

Informed by strategic land use planning undertaken at both State and local levels, the *Goulburn Mulwaree Local Environmental Plan 2009* (GMLEP) is a statutory instrument that provides for land use planning in the LGA. The GMLEP provides the mechanism for the approval of development. It identifies a number of general aims specific to housing and provides detailed land use zones and development permissibility.

The relevant aims of this Plan are as follows:

- » to promote and co-ordinate the **orderly and economic use and development of land** in the area
- » to enhance and **provide a range of housing opportunities** in, and the residential and service functions of, the main towns and villages in Goulburn Mulwaree
- » to **establish a framework for the timing and staging of development** on certain land in Goulburn and Marulan
- » to provide a range of housing opportunities, including **large lot residential development in the vicinity of the villages**
- » to allow development only if it occurs in a manner that **minimises risks due to environmental hazards**, and **minimises risks to important elements of the physical environment, including water quality**
- » to **provide direction and guidance as to the manner in which growth and change are to be managed** in Goulburn Mulwaree
- » to **protect and enhance watercourses**, riparian habitats, wetlands and water quality within the Goulburn Mulwaree and Sydney drinking water catchments so as to enable the **achievement of the water quality objectives**.

The GMLEP includes two primary Residential zones; General Residential (R1) and Low Density Residential (R2), although little distinguishes these.

Residential accommodation in a number of forms, is equally permissible in both Land Use Zones, including, for example, multi dwelling housing in the Low Density Residential R2 zone. The minimum lot size for the erection of a dwelling in the R1 and R2 zones is 700sqm, however, despite the minimum lot size, the GMLEP includes provisions in clause 4.1A that allow lots to be created at a minimum of 350sqm in certain circumstances.

Flexibility in the planning instrument is important in encouraging development, however, in reviewing the operation of the GMLEP in the context of the Strategy, consideration has been given to the built form outcomes and community feedback in relation to lower lot sizes in the greenfield development areas which are R2 zone.

Appendix C includes clause 4.1A and provides additional comparison of the R1 and R2 land use tables.

1.3 Local Government Area Snapshot

Goulburn Mulwaree LGA is centrally located on the fringe of the ACT within a one hour drive from Canberra and less than two hours' drive from Sydney, providing access to employment and global markets. The LGA is dissected by the Hume Highway, one of the most significant and trafficable transport corridors in Australia. It is connected to Canberra and the ACT by the Federal Highway.

The Goulburn Mulwaree LGA offers a lifestyle founded on historic agricultural and pastoral enterprises, as well as an emerging urban centre with the attributes and amenities of a sophisticated regional city.

It is estimated that around 2,000 people currently commute daily from Goulburn to Canberra or Sydney. It is likely that this number will increase in the future due to constrained land supply in these major cities and significant housing affordability issues, increased transport options from Goulburn, and the introduction of the NBN, making Goulburn and Marulan attractive places to reside. The (former) Department of Planning and Environment (DPE) population projections (2016) forecast that the population of Goulburn will reach **33,550** by 2036. This population growth will further increase the demand for housing within Goulburn Mulwaree LGA.

In 2016 the usual resident population of Goulburn Mulwaree was 30,261, living in 13,739 dwellings with an average household size of 2.39. Consistent with regional NSW, people aged between 50 and 60 represent the highest proportion of Goulburn Mulwaree's population.

The predominant housing type across the LGA is single detached dwellings at 85.9%. Dwellings with 3 bedrooms were the most common in the LGA in 2016 at **41.0%**. The percentage of 4 bedroom dwellings increased by 1.3% to **26.3%** between 2011 and 2016 meaning that over 67% of all dwellings have at least three bedrooms. Over the same period the average occupancy rate of dwellings fell from 2.4 to 2.3 persons per dwelling.

In 2017 a significant majority of all residential building approvals were for detached houses. However, the proportion of other housing types is increasing and in 2017, 31 percent of all residential building approvals were for other forms of residential development.

Connectivity to the two major capital cities and surrounding region means that a key proportion of Goulburn residents travel outside the LGA for employment. As transport infrastructure improves and technology evolves, it is anticipated that this trend will continue. In response, Goulburn provides an attractive and affordable option for lifestyle or tree changers seeking reprieve from high property prices and congestion while still benefiting from access to a strong and growing region and the global economy for employment.

The high-quality natural assets and biophysical attributes of the region area also provide opportunities for economic development and in turn are generating growth in population and

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driving demand for housing. The region has seen continued economic growth particularly in the renewable energy sector in the form of wind and solar farms.

Recent announcements by both state and federal governments in relation to improving the rail commute between Sydney, Melbourne and Canberra are promising and will further drive housing demand in the LGA through improved access to markets, employment, higher order services and recreation. It will also drive improved tourism through counter flow to Goulburn and the Goulburn Mulwaree LGA.

Dwellings Growth Forecast Goulburn Township 2016-2036

10,038



2016

12,674



2036

+2,636



Dwellings Growth Forecast Goulburn Mulwaree LGA 2016-2036

13,739



2016

17,098



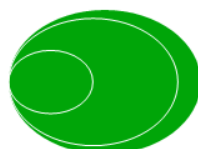
2036

+3,359



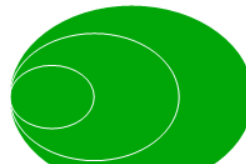
Population Growth Forecast Goulburn Township 2016-2036

22,840



2016

28,938



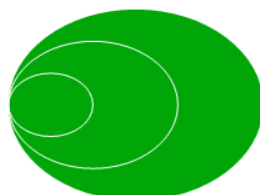
2036

+6,098



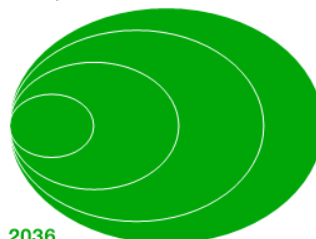
Population Growth Forecast Goulburn Mulwaree LGA 2016-2036

30,261



2016

37,202



2036

+6,941



Growth Rings in intervals of 5,000 or 10,000 people of proportion thereof



Population

Estimated Resident Population (ERP) for the whole LGA as of 2016 census

30,261

Median age as of the 2016 census

40 years old

Projected population for the whole LGA to 2036

37,202 (+6,941)

Projected annual growth rate

1.15% per year

Projected number of single person households for whole LGA to 2036

4,633 (+1,128)



Property

GOULBURN

R1 General Residential Land – **693.7ha**

R2 Low Density Residential Land – **621.3ha**

MARULAN

R1 General Residential Land – **131.4ha**

R2 Low Density Residential Land – **14.9ha**

MEDIAN RESIDENTIAL LAND VALUE Median house price
www.realestate.com.au/neighbourhoods/

Goulburn – **\$425,000**

Marulan – **\$460,000**

TOTAL PRIVATE DWELLINGS FOR THE WHOLE LGA AS OF THE 2016 CENSUS – 13,562

% of detached dwellings – **85.9%**

% of medium density dwellings* – **11.0%**

% of high-density dwellings^ – **0.7%**

Number of dwellings approved in 2017/18 – **241**

* includes dual occupancy attached, villa and town house development
 ^ residential flat buildings, shop top housing



Employment

14,031

residents employed as of June 2017

77.5% (9,842)

of residents **work within the Goulburn Mulwaree LGA**

22.5% (2,852)

of residents **work outside of the Goulburn Mulwaree LGA**

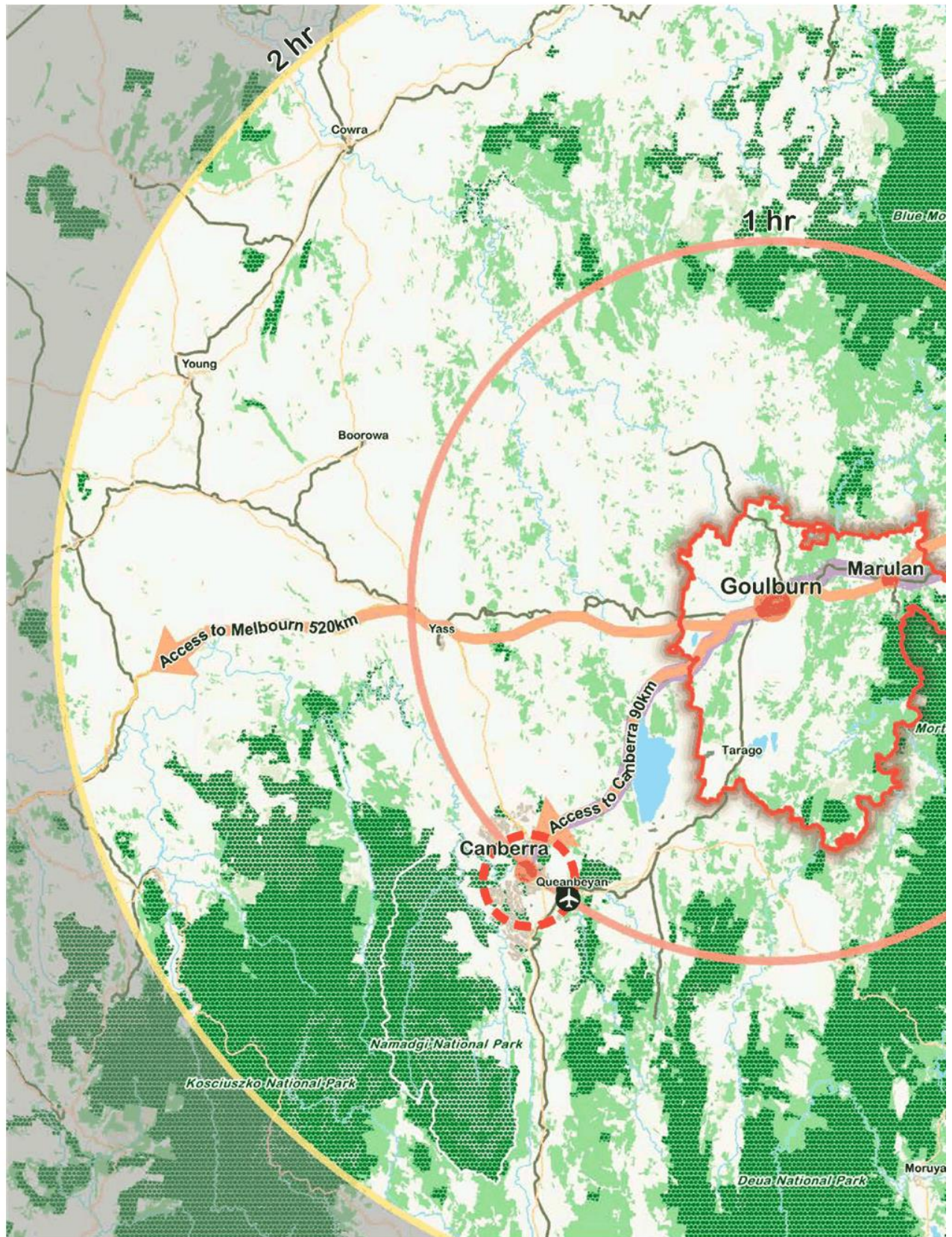
6.9% (882)

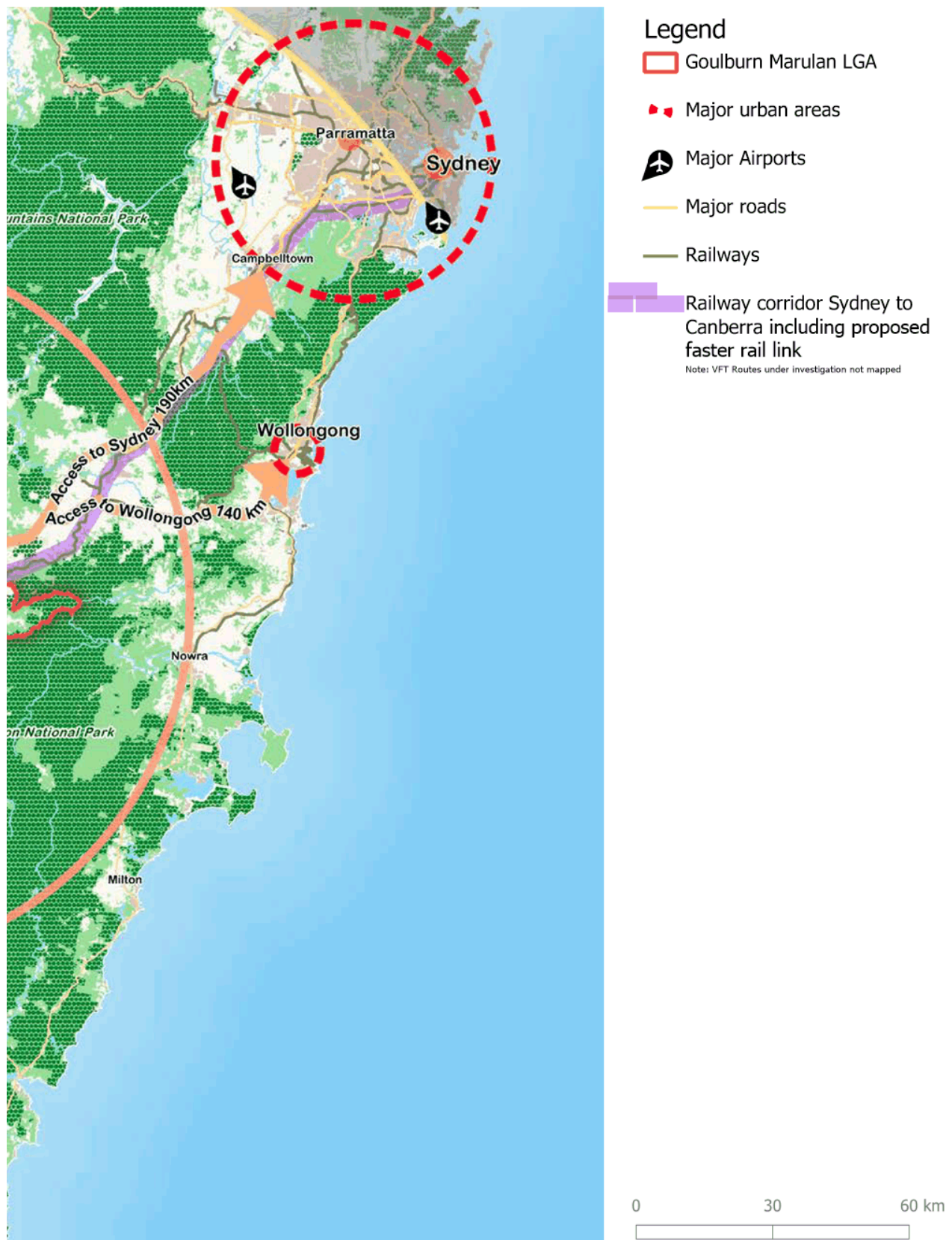
of residents **travel to the ACT for work**

The largest industry is the Health Care and Social Assistance industry employing

17.4% (2,295)

of residents





1.4 What land is affected by the strategy

The land to be considered under the Strategy was identified by Council as all land within the urban areas of Goulburn and Marulan and land immediately adjoining land zoned for urban purposes as illustrated in the Figures below.

Figure 2 Goulburn

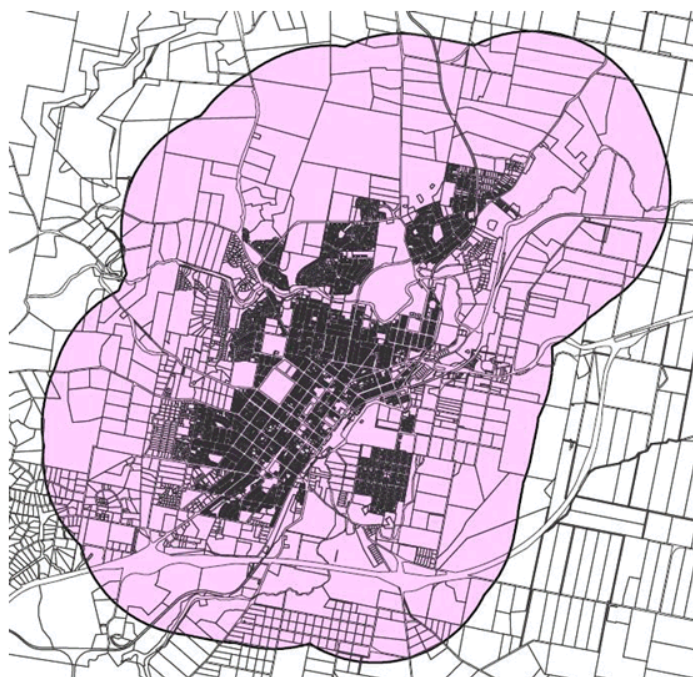
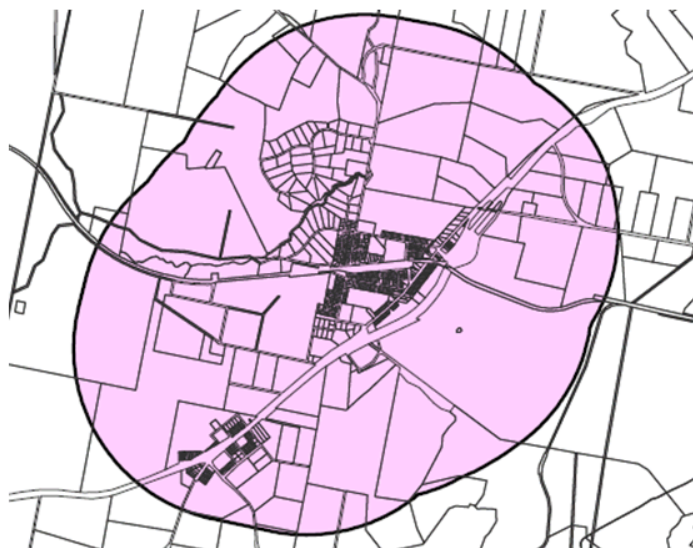


Figure 3 Marulan



1.5 Precincts

For the purpose of this Strategy Goulburn has been divided into twenty (20) precincts (Urban and Fringe) and Marulan into four (4). The precinct boundaries area mapped and shown in Figures 4 and 5.

Goulburn Fringe Precincts

There are eleven (11) precincts identified on the urban fringe of Goulburn. The precincts are defined by physical characteristics, rather than visual or character elements. The additional precincts have been created in response to the need to better define the constraints, understand the existing development and enable consideration of large lot residential development in addition to Urban Release Areas (URAs) for serviced residential growth.

Goulburn Urban Precincts

The character of the urban area of Goulburn is influenced by the built form and housing typologies. The Heritage Conservation Area in Goulburn and numerous heritage items in both Goulburn and Marulan also contribute to the urban character.

The DCP identifies 6 distinctive locality character areas in Goulburn based on the original Heritage Study undertaken in 1983 by Leister Firth Associates. The character areas focus on the housing character and in reviewing the urban areas for the purpose of the Strategy it has been necessary to define a further three localities, being Goulburn Central (including the Heritage Conservation Area), Correctional Centre, and Run 'O' Waters (formerly Ducks Lane).

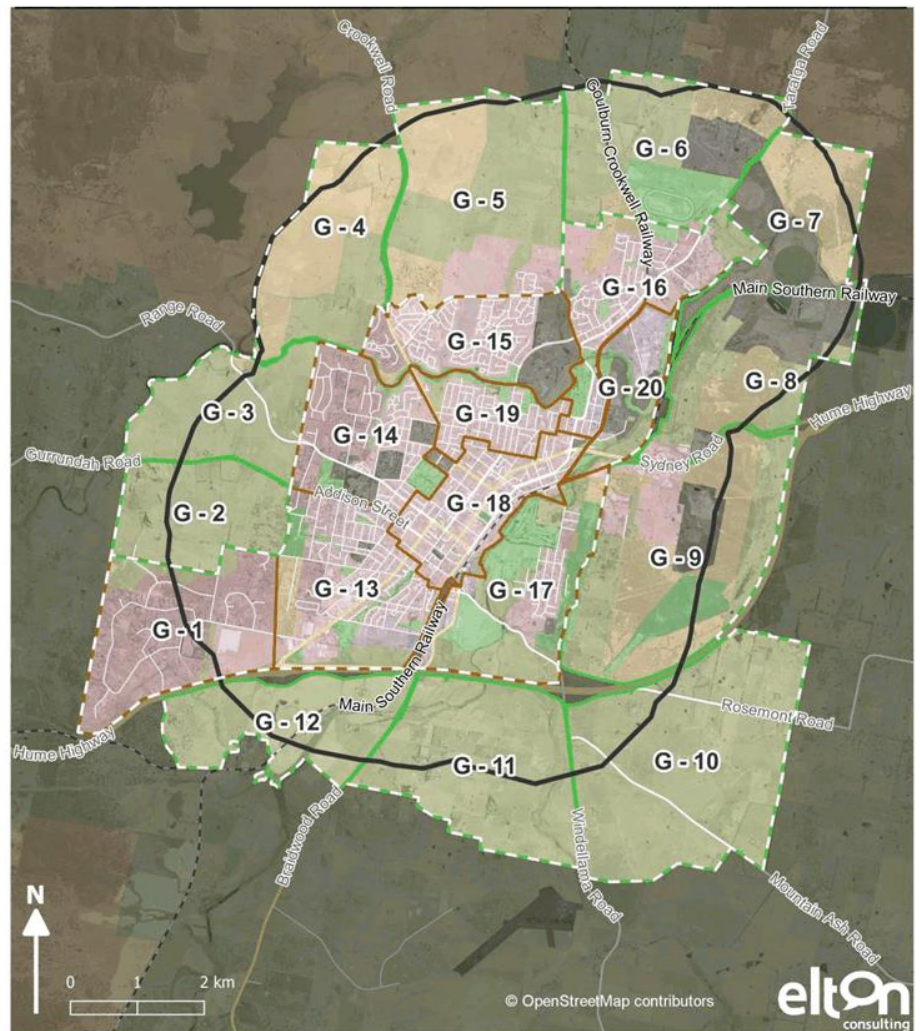
The existing locality character areas in Goulburn have been used as the basis for the Housing Strategy and are identified in the DCP as follows:

- » **Bradfordville:** the area between Kenmore and the NSW Police College, on the Taralga Road approach. This area includes historic Kenmore Asylum and the site is identified in the GMLEP as a Heritage Conservation Area
- » **Eastgrove:** the area on the slopes below Memorial Road, east of the Railway line
- » **Garfield:** below Combermere Street
- » **West Victoria Park (formerly Western):** broadly west of Victoria Park and Fitzroy Street
- » **Ifield:** older streets abutting the existing conservation area whose block pattern springs off the line of Citizen Street, bounded by the Wollondilly River
- » **Marys Mount:** the area north of the Wollondilly River below Marys Mount Road

The three additional areas are:

- » **Goulburn Central** – including the city centre and the Heritage Conservation Area
- » **Correctional Centre** – including Goulburn Correctional Centre and Sewerage Treatment Plant
- » **Run 'O' Waters (formerly Ducks Lane)** – Large Lot residential area on the western fringe of the urban area

Figure 4 Goulburn Urban and Fringe Precincts



Legend

Precincts
 Urban
 Fringe

G - 1 Run 'O' Waters (existing)	G - 9 Mt Gray	G - 17 Eastgrove
G - 2 Run 'O' Waters (rural north)	G - 10 Mountain Ash	G - 18 Central Goulburn
G - 3 Baw Baw	G - 11 Brisbane Grove	G - 19 Ifield
G - 4 Sooley	G - 12 Abattoir	G - 20 Correctional Centre
G - 5 Middle Arm West	G - 13 Garfield	
G - 6 Middle Arm East	G - 14 West Victoria Park	
G - 7 Kenmore	G - 15 Marys Mount	
G - 8 Gorman Rd	G - 16 Bradfordville	

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Marulan Precincts

As with Goulburn, Marulan has been divided by precinct to facilitate a more robust analysis of the key constraints and in doing so identification of opportunities for development. There are four (4) precincts in Marulan:

- » **Marulan** Town Centre - the existing village footprint
- » **Marulan North** - the area between Brayton Road, Hume Highway and Ambrose Road/Red Hills Road
- » **Marulan East** – the area east of the Hume Highway and north east of Marulan South Road
- » **Marulan West** – the area west of Marulan Town Centre including Lynwood Quarry.

Figure 5: Marulan Precincts



Legend

Precincts
 Urban
 Fringe

M - 1 Marulan Town Centre
 M - 2 Marulan East
 M - 3 Marulan North
 M - 4 Marulan West

1.6 Housing Vision and Guiding Principles

The housing vision and principles reflect the outcomes of the early community consultation undertaken by Council and submissions received during the two public exhibition periods. The priorities and principles support delivery of the vision, underpin the Strategy and inform the housing actions outlined in Section 4 of the Strategy.

The LGA is experiencing significant growth, the demographic is changing and the population is getting older. The proximity of the region to Canberra and Sydney, particularly West and South Western Sydney and the new Western Sydney Airport are key regional advantages. Government policy that includes investigation of faster rail and improved road transport will further enhance the liveability for the LGA.

Technology will continue to influence and change the way we live and work. Improvements in connectivity, the NBN and faster and more reliable internet will enable a generation that will include a mobile and flexible workforce.

The Strategy consultation informed a vision of the delivery of housing that:

- » encourages higher density residential development closer to the Goulburn CBD
- » relies on the already zoned land to continue to deliver infill and medium density housing in suitable locations
- » considers sites on a merits-basis where serviced lots within the existing urban footprint become surplus to needs, or the land uses change
- » maximises the use of existing infrastructure and minimises the cost of development to Council and the community
- » encourages and meets the demand for a range of lot sizes and dwelling types
- » provides adequate open space, green linkages, and opportunities for walking and cycling
- » considers opportunities for larger lots, especially around Marulan, with a suitable supply of land for this purpose provided for to 2036, identified within the Strategy
- » recognises that rural residential subdivision is land intensive, therefore proposals to rezone to urban residential or to reduce minimum lot sizes outside the areas nominated in this Strategy will generally not be considered by Council
- » avoids environmentally sensitive areas and areas of high value conservation and natural hazards
- » meets the strategic direction articulated in the Regional Plan

Strategic approach to zoning

- » Zone boundaries are not nominated in this Strategy in recognition that detailed site analysis through a Planning Proposal process is required
- » Council will consider zoning land for Public Recreation and Environmental Conservation on a case by case basis
- » Lots will generally be zoned with a 700sqm Minimum Lot Size in areas that are serviceable
- » Large lots will be strictly limited to areas that cannot be feasibly serviced at any point in the lifetime of the Strategy
- » Planning proposals for urban release areas which maximise the use of existing hard infrastructure will be prioritised. Planning proposals for sites which require extension of services beyond other green field sites will not be supported.

Section 2 - The Evidence

2 The Evidence

The following section provides the evidence base for the Strategy. It includes the demographic and population analysis, housing supply and demand, the opportunities and constraints to the delivery of housing and the identification of areas that have capacity for further development.

The opportunities and constraints have been provided at both a high level for both Goulburn and Marulan and at precinct level; twenty (20) precincts for Goulburn and four (4) in Marulan.

2.1 Demographic Overview

2.1.1 Population

As of 2018, the Estimated Regional Population for the Goulburn Mulwaree LGA was 30,556⁴ compared with the 2016 Census population of 29,609⁵. The population data and projections used for the Strategy have been compiled by Forecast.id. Forecast.id have divided the LGA into six smaller areas: Central – CBD; Central – North; Central – South; North; South East; and West. Two other areas, Rural North and Rural South, make up the remainder of the LGA's population. It should be noted that Marulan is included in the statistics for Rural North, however, where relevant the ABS Community Profile Data for Marulan Urban Centre⁶ has also been used.

As of 30 June 2018, the official population of Goulburn was 23,319⁷, compared with a 2016 Census population of 22,890⁸. Goulburn's population represents approximately three quarters of the overall LGA population.

Estimated Regional Population data is not available for Marulan. Based on the 2016 Census, the population for the Marulan Urban Area (**Figure 7**) was 685⁹. Together Goulburn and Marulan accounted for 83% of the LGA's total population in 2016.

⁴ <https://profile.id.com.au/goulburn/population-estimate>

⁵ https://quickstats.censusdata.abs.gov.au/census_services/getproduct/census/2016/quickstat/LGA13310

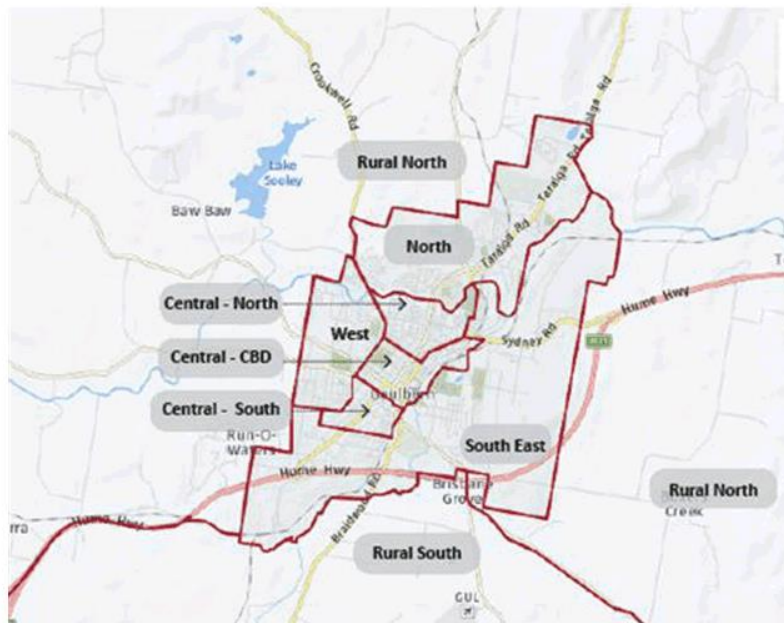
⁶ Marulan Urban Centre as defined by the ABS at <https://quickstats.censusdata.abs.gov.au/census>

⁷ <https://profile.id.com.au/goulburn/population-estimate>

⁸ https://quickstats.censusdata.abs.gov.au/census_services/getproduct/census/2016/quickstat/UC L112008

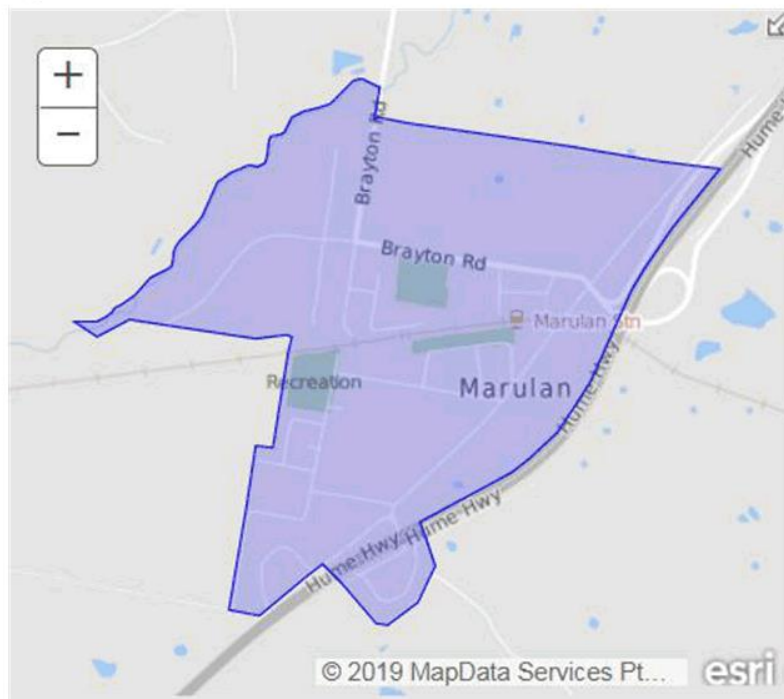
⁹ http://quickstats.censusdata.abs.gov.au/census_services/getproduct/census/2016/quickstat/SSC12513

Figure 6 Goulburn City Population Catchments



Source: Population experts/ABS/Elton Consulting

Figure 7 Marulan Urban Area

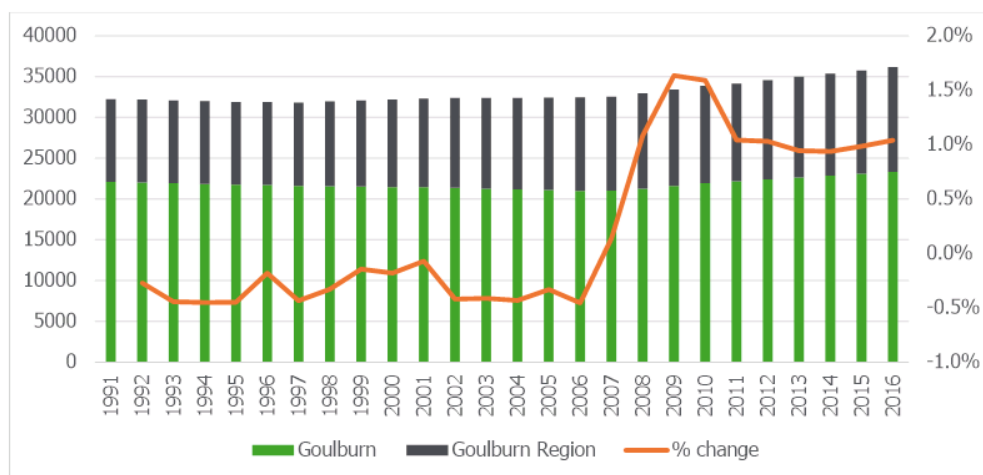


Source: ABS 2016 Census Community Profile (Marulan Urban Area)

In the years between 1991 and 2006, Goulburn experienced a declining population of between -0.1 per cent and -0.5 per cent per year (in line with the LGA). In 2007, the population increased for the first time since 1991, gaining 29 people (0.1 per cent). In 2009 and 2010, the population of Goulburn increased 1.6 per cent each year before steadying to growth of between 0.9 per cent and 1.0 per cent between 2011 and 2016.

The population of Marulan in 2011 was 587, increasing by 17% to 685 in 2016. For Goulburn, the population increase was less pronounced, increasing from 21,484 in 2011 to 22,890 in 2016; an increase of 7%.

Figure 8 Goulburn Mulwaree LGA Population 1991 to 2016



Australian Bureau of Statistics, Census of Population and Housing, 1991-2016

Table 3 Population Size (2006-2016)

	2006	2011	2016	Percentage change 1996 to 2016
Goulburn	20,127	21,484	22,890	14%
Marulan	540	587	685	27%
Balance of LGA	5,419	5,410	6,034	11%
Total	26,086	27,481	29,609	14%

Population forecast

There are two sources of population forecasts; the first is work commissioned by Council and undertaken by Forecast.id. The second set of data has been provided by the former NSW Department of Planning and Environment (DPE). The projections vary, however are consistent to the extent that the trend continues to be upward.

The table below includes the total population forecast for the LGA including the DPE projections.

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Table 4 Goulburn Mulwaree population forecast 2016 to 2036

	2016	2021	2026	2031	2036	Percentage change 2016 to 2036
Forecast .id	30,158	32,167	33,863	35,567	37,202	23.4%
DPE low estimate	29,600	30,850	31,900	32,750	33,350	12.7%
DPE medium projection	29,750	31,100	32,350	33,450	34,400	15.6%
DPE high projection	29,900	31,450	32,950	34,400	35,750	19.6%
Average projection	29,852	31,392	32,766	34,042	35,176	17.8%

2016 New South Wales State and Local Government Area Population Projections/ Population and household forecasts, 2016 to 2036, prepared by .id the population experts, December 2017

As shown in the table above, the Goulburn-Mulwaree LGA has a projected population growth of between 12.7 per cent and 23.4 per cent between 2016 and 2036. At its highest estimate, the LGA will increase by 7,000 people to a total population of 37,202. At its lowest estimate, the LGA will still see an increase of 5,000 people to 33,350.

In 2016 Marulan accounted for 4% of the total population and Goulburn 79%. Applying the same proportions, the population increase would be 200-280 additional people in Marulan and 3,950-5,530 people in Goulburn between 2016 and 2036.

The population of the Goulburn-Mulwaree LGA by Forecast.id is forecast to increase by 23.4 per cent to an estimated 37,202 by the year 2036. Of the estimated growth, Goulburn City is forecast to house a total population of 28,938 by 2036, maintaining an increase of between 0.9 per cent and 2.0 per cent each year. The areas forecast to experience the largest growth will be Goulburn North (+63.1 per cent), Goulburn West (+17.9 per cent) and Goulburn South East (+16.3 per cent). This forecast aligns with current trends due to recent rezoning and subdivision occurring in those areas and the availability of zoned residential land.

Table 5 Goulburn population forecast 2016 to 2036

	2016	2021	2026	2031	2036	Percentage change 2016 to 2036
Goulburn (Central - CBD)	2,437	2,531	2,560	2,583	2,611	7.1%
Goulburn (Central - North)	4,735	4,820	4,914	4,988	5,066	7.0%
Goulburn (Central - South)	2,514	2,610	2,707	2,877	2,911	15.8%
Goulburn (North)	6,398	7,560	8,453	9,417	10,437	63.1%
Goulburn (South East)	3,248	3,416	3,610	3,707	3,776	16.3%
Goulburn (West)	3,508	3,760	3,957	4,052	4,137	17.9%
Goulburn Total	22,840	24,697	26,201	27,624	28,938	26.7%

Population and household forecasts, 2016 to 2036, prepared by .id the population experts, December 2017

Age Distribution

The Goulburn LGA increased by 2,147 people between the 2011 and 2016 Census. The age groups that experienced the greatest growth were the Young Workforce (+597), Seniors (+443) and Empty nesters and retirees (+416). There were declines experienced in the Parents and homebuilders (-108) and Secondary schoolers (-81) groups.

Table 6 Service Age Groups Census 2016

Service age group (years)	2011		2016		Change
	Number	%	Number	%	2011 to 2016
Babies and pre-schoolers (0 to 4)	1,676	6.1	1,742	5.9	+65
Primary schoolers (5 to 11)	2,417	8.8	2,612	8.8	+194
Secondary schoolers (12 to 17)	2,214	8.1	2,134	7.2	-81
Tertiary education and independence (18 to 24)	2,113	7.7	2,302	7.8	+188
Young workforce (25 to 34)	2,969	10.8	3,567	12.0	+597
Parents and homebuilders (35 to 49)	5,615	20.4	5,507	18.6	-108
Older workers and pre-retirees (50 to 59)	3,785	13.8	4,084	13.8	+299
Empty nesters and retirees (60 to 69)	3,321	12.1	3,738	12.6	+416
Seniors (70 to 84)	2,748	10.0	3,192	10.8	+443
Elderly aged (85 and over)	605	2.2	738	2.5	+132
Total			29,616	100.0	+2,147

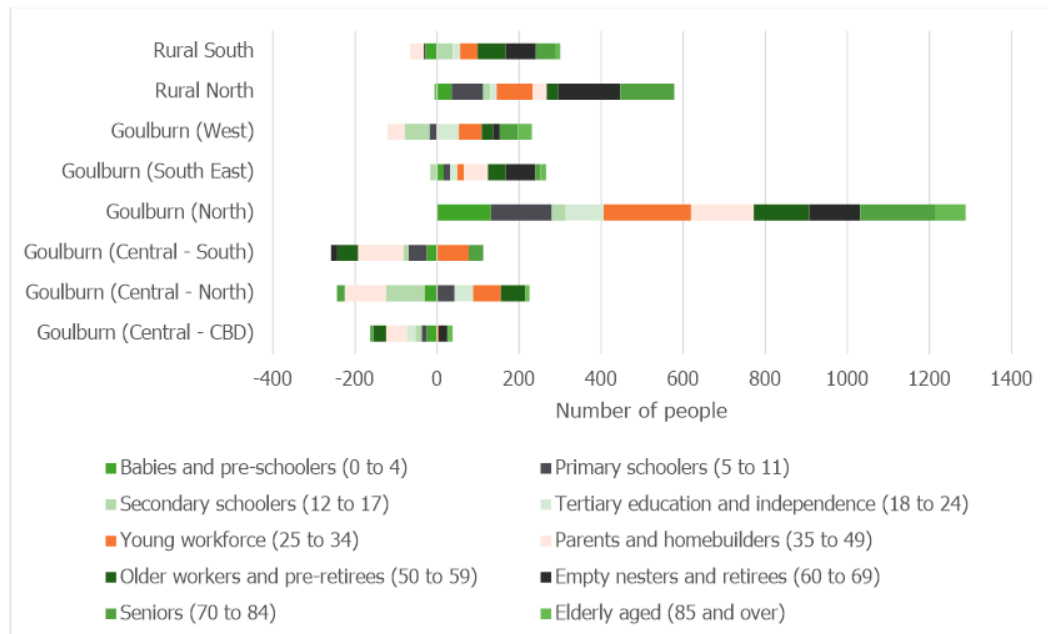
Australian Bureau of Statistics, Census of Population and Housing, 2016 (Usual residence data). Compiled and presented in profile.id by .id, the population experts.

A breakdown of the age structure change by locality indicates the extent of growth and where growth has occurred. The greatest increase was experienced in Goulburn (North) with an increase of 1,288 people. Central - South and Central - North both experienced declines in population (-146 and -125 respectively). Of the decline Parents and homebuilders (35 to 49) were the largest group. Central - South saw a decline of -111 and Central - North saw a decline of -100. In addition, Central North saw decline of -94 Secondary schoolers.

Of the largest segments of growth, being the 60-84 age bracket and young workforce, 131 young workers chose to locate with the LGA and 466 located within the City of Goulburn. Of this around half have located within Goulburn (North).

The north has seen the greatest growth as it is a recent greenfield land supply.

Figure 9 Age Structure change by locality (Precinct), 2011 to 2016



Population and household forecasts, 2016 to 2036, prepared by .id the population experts, December 2017.

It is expected that between 2016 and 2036, the age groups with the largest growth will be the 70 to 84 age group (55.4 per cent) and the 85 and over age group (45.4 per cent). This indicates that Goulburn Mulwaree will need to prepare for an ageing population. This is typical of many LGAs in the surrounding area and the nation. Parents and home builders will also represent one of the dominant sectors of the community. This trend represents the successful growth and retention of the current (2017) young workforce. By 2036, it is anticipated that 27.5% of the population will be over the age of 65.

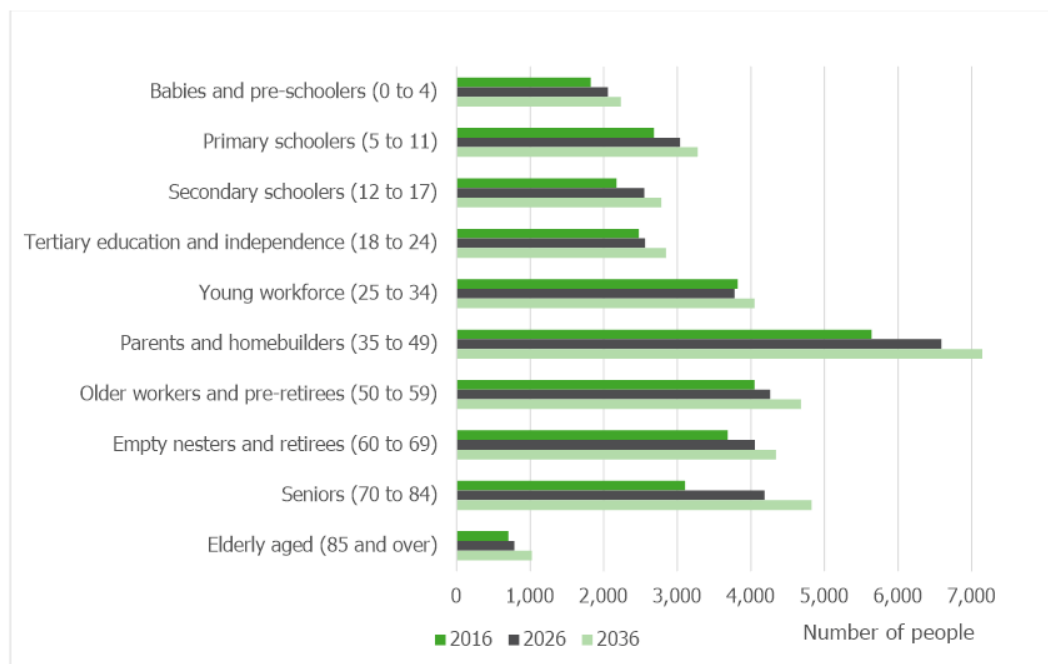
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Table 7 Forecast age structure - Service age groups

Goulburn Mulwaree Council area - Total persons	2016		2026		2036		Change between 2016 and 2036
Age group (years)	Number	%	Number	%	Number	%	Number
Babies and pre-schoolers (0 to 4)	1,822	6	2,058	6.1	2,232	6	410
Primary schoolers (5 to 11)	2,685	8.9	3,039	9	3,277	8.8	592
Secondary schoolers (12 to 17)	2,174	7.2	2,551	7.5	2,783	7.5	609
Tertiary education and independence (18 to 24)	2,479	8.2	2,563	7.6	2,845	7.6	366
Young workforce (25 to 34)	3,818	12.7	3,779	11.2	4,050	10.9	233
Parents and homebuilders (35 to 49)	5,638	18.7	6,587	19.5	7,145	19.2	1,507
Older workers and pre-retirees (50 to 59)	4,049	13.4	4,263	12.6	4,680	12.6	631
Empty nesters and retirees (60 to 69)	3,684	12.2	4,052	12	4,339	11.7	655
Seniors (70 to 84)	3,105	10.3	4,185	12.4	4,826	13	1,721
Elderly aged (85 and over)	705	2.3	786	2.3	1,024	2.8	320
Total persons	30,158	100	33,863	100	37,202	100	7,043

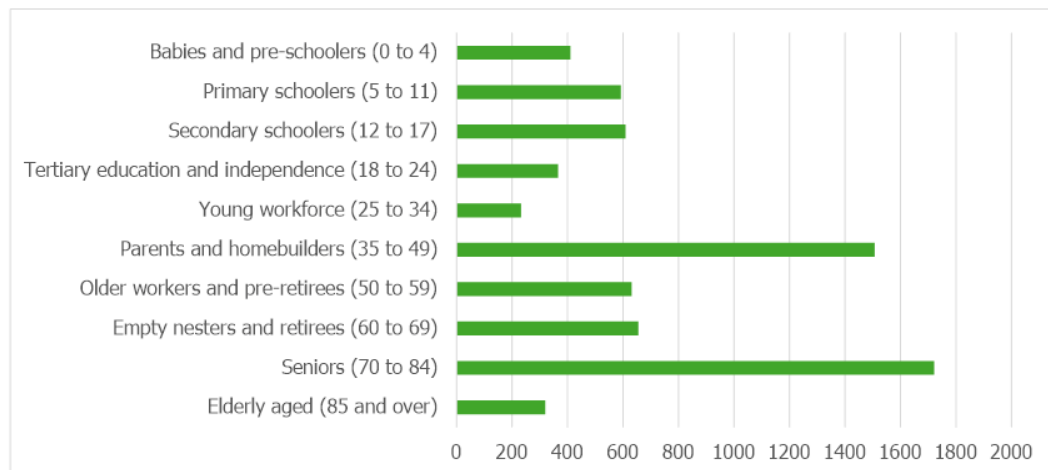
Australian Bureau of Statistics, Census of Population and Housing, 2016 (Usual residence data). Compiled and presented in profile.id by .id, the population experts.

Figure 10 Forecast age structure - Service age groups



Australian Bureau of Statistics, Census of Population and Housing, 2016 (Usual residence data). Compiled and presented in profile.id by .id, the population experts.

Figure 11 Change in service age groups - 2016 to 2036



Australian Bureau of Statistics, Census of Population and Housing, 2016 (Usual residence data). Compiled and presented in profile.id by .id, the population experts

Dwelling Requirements

The number of required dwellings within the Goulburn Mulwaree LGA can be inferred based on the current rate of population growth, and would be expected to increase by an additional 3,359

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dwellings by the year 2036. Of this, the area with the largest increase is expected to be Goulburn (North) with 1,688 dwellings. This is due to the recent rezoning and development of Rural land to residential which has provided affordable and desirable housing for Goulburn City.

Table 8 Dwelling forecast 2016 – 2036 (Forecast.id)

	2016	2021	2026	2031	2036	Change 2016 to 2036
Goulburn (Central - CBD)	1,294	1,353	1,378	1,403	1,428	134
Goulburn (Central - North)	2,330	2,340	2,354	2,374	2,394	64
Goulburn (Central - South)	1,220	1,230	1,259	1,309	1,335	115
Goulburn (North)	2,425	2,880	3,266	3,679	4,113	1,688
Goulburn (South East)	1,208	1,306	1,410	1,475	1,524	316
Goulburn (West)	1,561	1,682	1,781	1,830	1,880	319
Rural North*	2,232	2,356	2,467	2,586	2,711	479
Rural South	1,469	1,512	1,570	1,640	1,713	244
Total	13,739	14,659	15,485	16,296	17,098	3,359

Population and household forecasts, 2016 to 2036, prepared by .id, the population experts, December 2017 * Rural North includes Marulan

Table 9 Dwelling forecast 2016 – 2036 (DPE)

	2016	2021	2026	2031	2036
Goulburn LGA	14,200	15,050	15,900	16,600	17,250

NSW Department of Planning 2016

By the end of the 2017/18 financial year, the Goulburn Mulwaree LGA had approved 241 residential dwellings. The largest number of dwellings approved was within the Goulburn City Statistical Area 2, ABS (SA2) with 123 houses. This was followed by the Goulburn Region (SA2) with 75 houses. There were 43 semi-detached dwellings approved in the Goulburn City (SA2).

2.1.2 Households

Table 10 Number of Households

	2016	2021	2026	2031	2036	Change 2016 to 2036
Goulburn (Central - CBD)	1,162	1,217	1,238	1,260	1,282	120
Goulburn (Central - North)	2,192	2,214	2,238	2,269	2,301	109
Goulburn (Central - South)	1,116	1,145	1,192	1,258	1,283	167
Goulburn (North)	2,312	2,746	3,112	3,505	3,920	1,608
Goulburn (South East)	1,116	1,206	1,302	1,364	1,409	293
Goulburn (West)	1,477	1,592	1,685	1,731	1,777	300
Rural North*	1,849	1,954	2,049	2,151	2,254	405
Rural South	1,011	1,040	1,082	1,130	1,179	168
Total	12,235	13,114	13,898	14,668	15,405	3,170

Population and household forecasts, 2016 to 2036, prepared by .id, the population experts, December 2017. * Rural North includes Marulan

All household types in the Goulburn Mulwaree LGA are expected to increase between 2016 and 2036. In the City of Goulburn, the households with the largest increase will be 'other families' (+38%), 'couples without dependents' (+32%), 'lone person households' (+29%) and 'couple families with dependents' (+28%). In the rural areas, lone person households are forecast to increase by 50%. This indicates that household sizes in the Goulburn Mulwaree LGA are expected to decrease.

Household Type

The following table shows that Goulburn contained a high proportion of family households in 2016. This suggests that families are attracted to the regional city and its facilities and residential amenity. Marulan likewise contains a significant proportion of family households. Both Goulburn and Marulan also have a high proportion of lone households (compared with Regional NSW).

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Table 11 Family Composition

	Household Type	2016	2021	2026	2031	2036	Change 2016 to 2036
Central/Urban	Couple families with dependents	2,384	2,611	2,768	2,905	3,041	28%
	Couples without dependents	2,386	2,598	2,792	2,976	3,156	32%
	Group households	235	239	242	253	260	11%
	Lone person households	2,950	3,156	3,378	3,594	3,799	29%
	One parent family	1,275	1,350	1,412	1,469	1,511	19%
	Other families	148	164	175	190	204	38%
	Total households	9,377	10,118	10,767	11,387	11,972	28%
Fringe	Couple families with dependents	860	856	869	895	934	9%
	Couples without dependents	1,119	1,170	1,220	1,266	1,312	17%
	Group households	70	71	68	67	66	-6%
	Lone person households	555	633	706	768	834	50%
	One parent family	188	195	197	207	209	11%
	Other families	67	69	72	78	81	21%
	Total households	2,860	2,995	3,131	3,280	3,434	20%

Population and household forecasts, 2016 to 2036, prepared by .id, the population experts, December 2017

2.1.3 Household Characteristics

Household Size

By the year 2036, the average household size in the Goulburn Mulwaree LGA is expected reduce to 2.33 people per household. This trend is consistent with the reducing number of bedrooms in dwellings. Different areas within the Goulburn Mulwaree LGA fluctuate between a household size of 1.98 and 2.60. Goulburn (North) is forecast to have the largest dwelling size (2.60) by the year 2036, while the Central CBD is expected to have the smallest (1.98). This indicates that the central area of Goulburn should expect to cater for smaller households while Goulburn (North) will need to provide for larger households.

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Table 12 Household size 2016 – 2036

	2016	2021	2026	2031	2036
Goulburn (Central - CBD)	2.03	2.02	2.01	1.99	1.98
Goulburn (Central - North)	2.13	2.15	2.17	2.17	2.18
Goulburn (Central - South)	2.15	2.18	2.17	2.17	2.15
Goulburn (North)	2.69	2.69	2.66	2.62	2.60
Goulburn (South East)	2.30	2.27	2.24	2.21	2.19
Goulburn (West)	2.35	2.34	2.33	2.32	2.31
Rural North*	2.59	2.51	2.46	2.42	2.41
Rural South	2.46	2.41	2.38	2.37	2.36
Total	2.37	2.36	2.35	2.34	2.33

Population and household forecasts, 2016 to 2036, prepared by .id, the population experts, December 2017 * Rural North includes Marulan

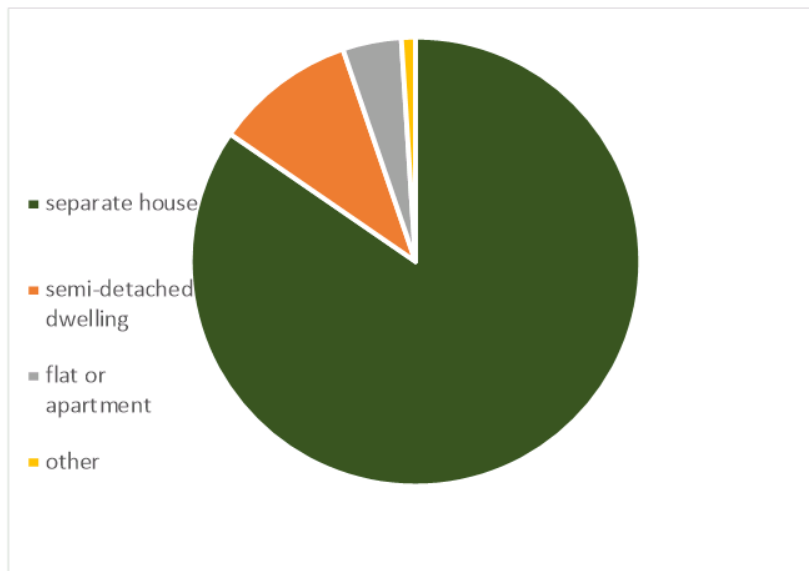
2.1.4 Dwelling Characteristics

Dwellings

Between 2011 and 2016 the number of dwellings in Goulburn increased from 9,136 to 9,445 or 3%. In Marulan there was a more significant increase of the number of dwellings from 254 to 291 or 15%.

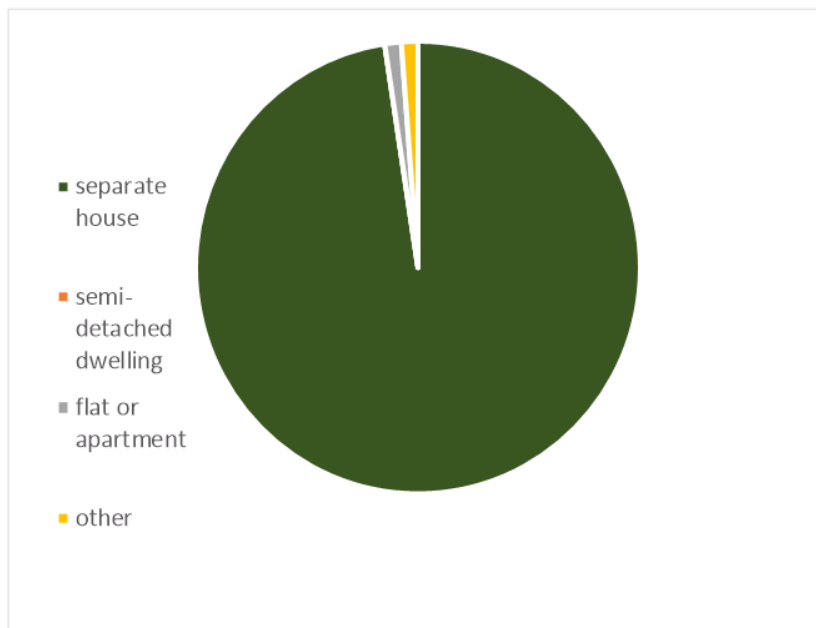
The 2016 Census confirmed that separate detached dwellings are the predominate form of housing in Goulburn representing 84%, with 10% described as semi-detached, row terrace or townhouses and 4% as flats or apartments. As of the 2016 census, 98% of dwellings in Marulan were separate detached houses.

Figure 12 Goulburn Dwelling Types



Source: ABS Community Profiles 2016

Figure 13 Marulan Dwelling Types



Source: ABS Community Profiles 2016

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Table 13 Number of bedrooms 2016

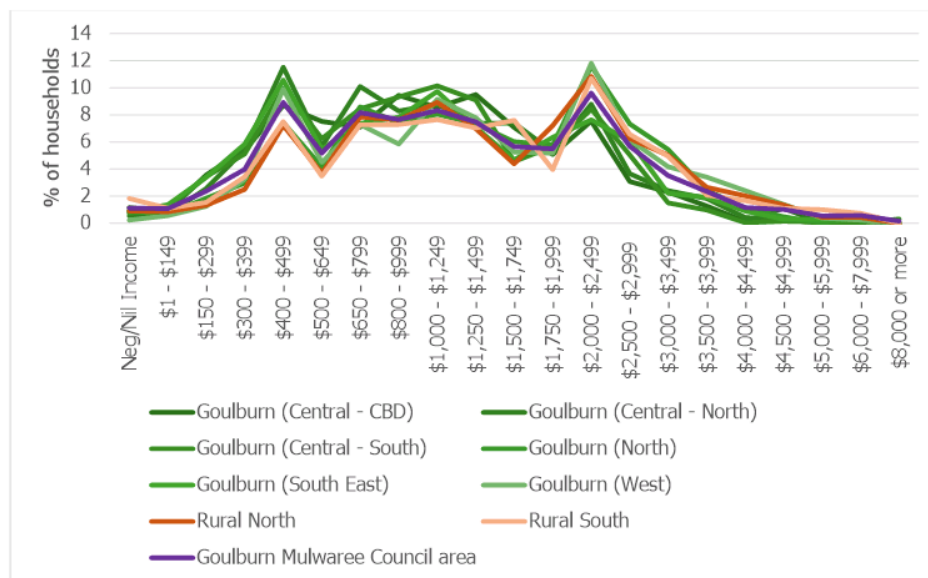
Number of Bedrooms	Goulburn	%	Marulan	%	NSW	%
None	28	0.3	3	1.2	17,157	0.7
1 bedroom	307	3.6	5	1.9	157,194	6.0
2 bedrooms	1,469	17.4	33	12.8	577,675	22.2
3 bedrooms	3,824	45.4	116	45.1	970,001	37.2
4 or more bedrooms	2,569	30.5	94	36.6	816,405	31.3
Not stated	231	2.7	6	2.3	65,888	2.5
Average No. per dwelling	3.1		3.2		3	
Average no. people per household	2.3		2.4		2.6	

Australian Bureau of Statistics, Census of Population and Housing 2016.

In terms of the dwelling structure, over 76% of dwellings in Goulburn and 82% in Marulan have 3 or more bedrooms.

2.1.5 Income and Relative Disadvantage

In the Goulburn Mulwaree LGA, the 'lowest' income quartile was the largest group in 2016, comprising 31 per cent of households with income. The most significant change in Goulburn Mulwaree LGA between 2011 and 2016 was in the medium lowest quartile which showed an increase of 180 households.

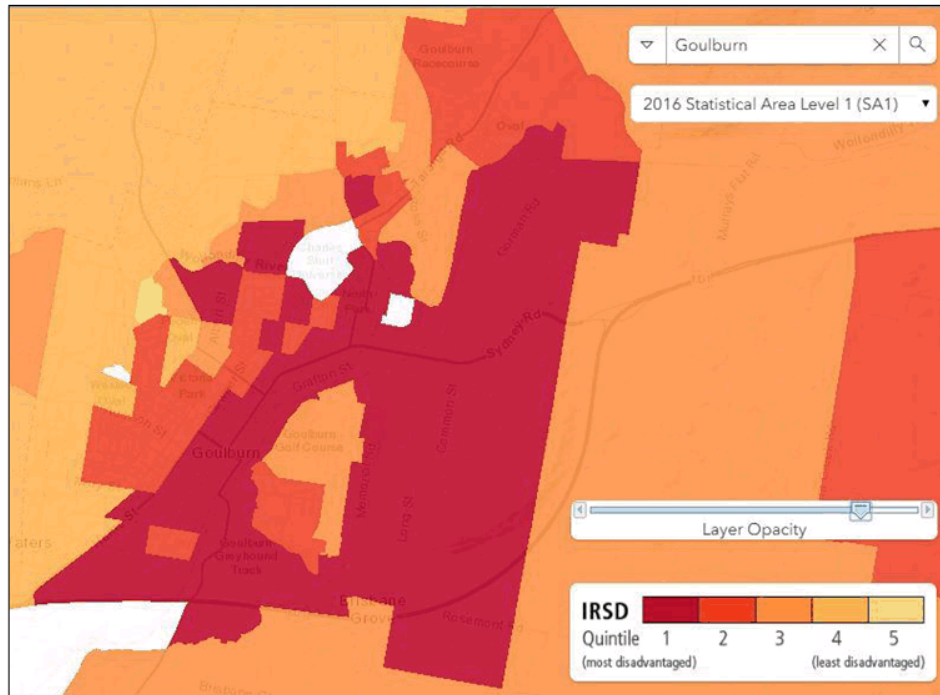
Figure 14 Goulburn Mulwaree LGA stated household income

Source: Australian Bureau of Statistics 2016, prepared by .id, the population experts

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The Socio-Economic Indexes for Areas (SEIFA) ranks areas in Australia according to relative socio-economic advantage and disadvantage. A low score indicates relatively greater disadvantage and a lack of advantage in general. Goulburn (SA2) has a SEIFA Index of Relative Socio-economic Disadvantage (2016) score of 948 and Marulan (SSC) has a score of 946, both of which are relatively more disadvantaged compared to the Goulburn Mulwaree LGA (960) and Regional NSW (971)¹⁰. As shown in **Figures 15 & 16**, the level of relative disadvantage varies spatially across Goulburn. Marulan's urban area is identified as most disadvantaged while the fringe is moderately disadvantaged¹¹.

Figure 15 SEIFA relative disadvantage Goulburn

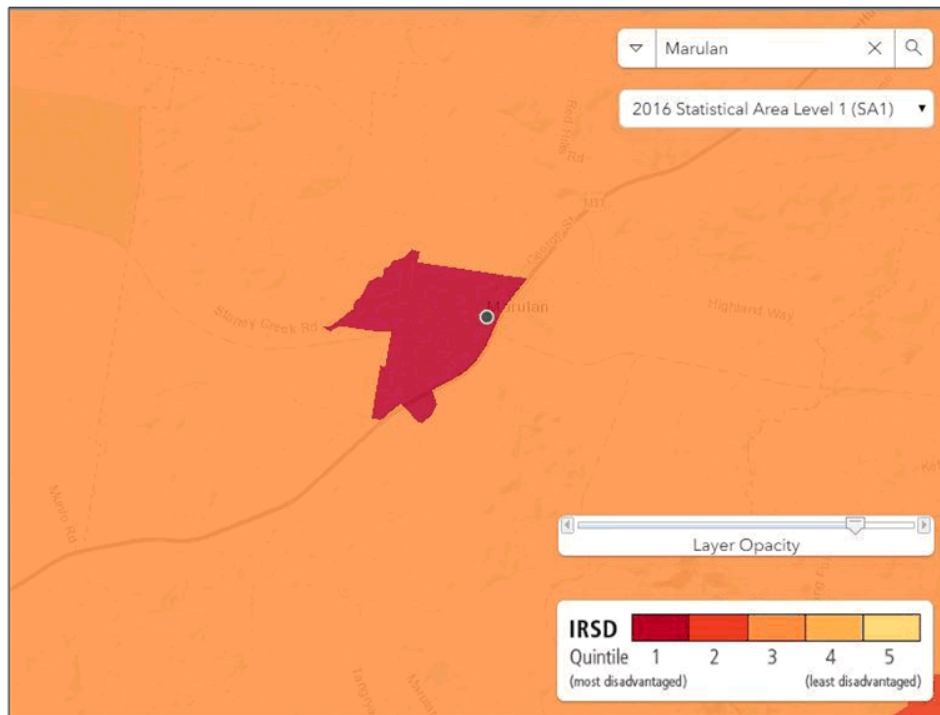


Source: Australian Bureau of Statistics, IRSD interactive map, powered by Esri.

¹⁰ Australian Bureau of Statistics, Census of Population and Housing: Socio-Economic Indexes for Areas (SEIFA), Australia, 2016

¹¹ Australian Bureau of Statistics, IRSD interactive map, powered by Esri.

Figure 16 SEIFA relative disadvantage Marulan



Source: Australian Bureau of Statistics, IRSD interactive map, powered by Esri.

2.1.6 Employment

As of the 2016 Census, the largest employers within the Goulburn Mulwaree LGA were health care and social assistance (15 per cent), public administration and safety (10.9%) and retail trade (10.7%).

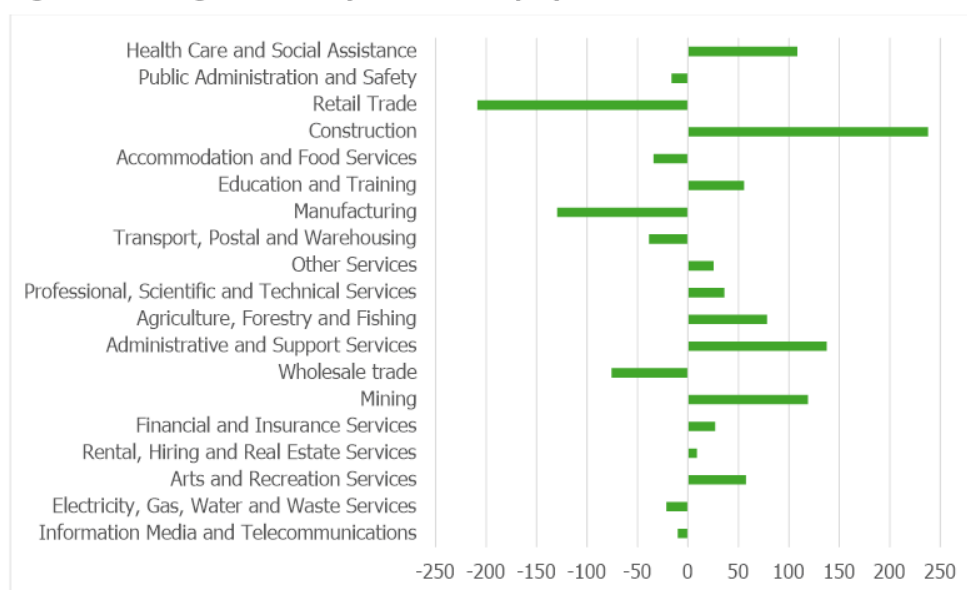
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Table 14 Industry sector of employment

LGA	2011			2016			Change
Industry sector	Number	%	Regional NSW %	Number	%	Regional NSW %	2011 to 2016
Health Care and Social Assistance	1,799	14.9	13.0	1,908	15.0	14.4	+108
Public Administration and Safety	1,399	11.6	7.2	1,383	10.9	7.2	-16
Retail Trade	1,572	13.0	11.4	1,364	10.7	10.3	-209
Construction	933	7.7	7.9	1,171	9.2	8.7	+238
Accommodation and Food Services	1,024	8.5	7.7	990	7.8	7.9	-34
Education and Training	882	7.3	8.6	938	7.4	9.0	+56
Manufacturing	837	6.9	8.3	708	5.6	6.0	-130
Transport, Postal and Warehousing	679	5.6	4.2	641	5.0	4.0	-39
Other Services	507	4.2	3.9	533	4.2	3.9	+26
Professional, Scientific and Technical Services	465	3.8	4.6	502	4.0	4.5	+36
Inadequately described or not stated	256	2.1	2.1	496	3.9	3.8	+240
Agriculture, Forestry and Fishing	396	3.3	5.8	475	3.7	5.7	+78
Administrative and Support Services	255	2.1	2.8	393	3.1	3.3	+138
Wholesale trade	302	2.5	2.8	227	1.8	2.0	-76
Mining	85	0.7	2.5	204	1.6	2.4	+119
Financial and Insurance Services	151	1.3	2.2	179	1.4	2.0	+27
Rental, Hiring and Real Estate Services	166	1.4	1.4	175	1.4	1.4	+9
Arts and Recreation Services	101	0.8	1.2	159	1.3	1.2	+57
Electricity, Gas, Water and Waste Services	174	1.4	1.5	153	1.2	1.3	-22
Information Media and Telecommunications	118	1.0	1.0	108	0.8	0.9	-10
Total	12,109	100.0	100.0	12,707	100.0	100.0	+598

Australian Bureau of Statistics, Census of Population and Housing, 2011 and 2016 (Usual residence data). Compiled and presented in profile.id by .id, the population experts. Note: people employed aged 15+.

Between the years 2011/12 and 2016/17, the industries within the Goulburn Mulwaree LGA that experienced the largest change in employed persons were health care and social assistance (+439), construction (+306), and manufacturing (-123).

Figure 17 Change in industry sector of employment, 2011 to 2016

Australian Bureau of Statistics, Census of Population and Housing, 2011 and 2016 (Usual residence data). Compiled and presented in profile.id by .id, the population experts.

As of the 2016 Census, 12,694 residents of the Goulburn Mulwaree LGA were employed. Of these employed residents, 77.5 per cent (9,842) worked within the LGA, 22.5 per cent (2,852) worked outside of the LGA and 4.5 per cent (575) had no fixed place of work. Health care and social assistance was the top employer by industry, followed by construction.

2.1.7 Workforce Mobility

Understanding the mobility of the workforce provides insight into the habits of residents and allows for assumptions to be made as to the population demographics likely to be generating demand for housing in the region into the future. It is telling that over 22% of the working population travel outside of the LGA for employment. This supports the view that to at least some extent, proximity to Canberra may play a role in the choice to relocate to Goulburn.

Table 15 Goulburn Mulwaree LGA Place of Work, 2016

Location	Number	%
Live and work in the area	9,842	77.5
Live in the area, but work outside	2,852	22.5
No fixed place of work	575	4.5
Total employed residents in the area	12,694	100.0

Australian Bureau of Statistics, Census of Population and Housing 2016. Compiled and presented in economy.id by .id, the population experts.

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Of the 22.5 per cent that work outside of the LGA 6.9 per cent work in the ACT. The remaining 15.6 per cent of the workforce are employed in the surrounding region within a catchment of around one to one and a half hours commute.

Table 16 Goulburn Mulwaree LGA – Place of Work (Top 10) 2016

LGA	Number	Percentage
Goulburn Mulwaree (A)	9,842	77.5%
ACT	882	6.9%
No Fixed Address (NSW)	572	4.5%
Wingecarribee (A)	387	3.0%
Queanbeyan-Palerang Regional (A)	237	1.9%
Upper Lachlan Shire (A)	212	1.7%
Sydney (C)	59	0.5%
Yass Valley (A)	38	0.3%
Wollongong (C)	35	0.3%
Wollondilly (A)	28	0.2%
Liverpool (C)	22	0.2%

Australian Bureau of Statistics, Census of Population and Housing 2016. Compiled and presented in economy.id by .id, the population experts.

2.1.8 Key Findings

ABS Census data and associated projections provide a reasonable insight into the growth and associated demand for housing for Goulburn Mulwaree LGA and the implications for Goulburn and Marulan.

Growth across the LGA has been strong over the past decade increasing by 14%. In Marulan population growth has been significant with an increase in population between 2006 and 2016 of 27%.

With the Goulburn Mulwaree LGA expected to reach between 33,350 and 37,202 residents by 2036, approximately 5,000 to 7,000 additional residents are expected. Given the drivers of growth include proximity to economically viable regions and affordable housing, these growth rates may increase over time if prices in Sydney and the ACT continue to rise. Advances in technology and improvements in transport, for example higher speed rail may further stimulate growth.

Of particular note, between 2016 and 2036, the 35 to 49 and 70 to 84 year old service age groups will be the largest growing groups within the Goulburn Mulwaree LGA. In addition, childless households will make up 59.1 per cent of all households by the year 2036, which is likely to generate an increase in demand for smaller dwellings.

Families with children will continue to reside within the current development front in Goulburn's north as evidenced by the forecast occupancy ratio of 2.60 people per dwelling by the year 2036, the highest of all Goulburn areas.

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To provide sufficient appropriate housing through to 2036, population growth, demographics and expected household sizes needs to be compared with current housing supply to determine the expected housing and residential needs of Goulburn and Marulan.

Further housing appropriate for families is required in the short to long term. Housing appropriate for the aging population will be required to allow current residents to age in place. Additionally, housing appropriate for ageing populations can be appropriate for residents seeking affordable and efficient living options.

2.2 Housing Demand

To understand the demand factors for housing, the Strategy has considered two methods to estimate future dwelling demand: population projections and dwellings approvals. To date Goulburn Mulwaree LGA's housing supply is mainly provided in Goulburn and Marulan and this trend is expected to continue.

The majority of recent growth has been through residential subdivisions in Goulburn and Marulan. These new subdivisions have typically provided R2 Low Density Residential zoned land with a minimum lot size of 700sqm. The market responded well to these releases driving demand for additional land as the currently zoned land nears full utilisation.

Further to the demand for the typical 700sqm house block, there is an emerging trend for more compact living close to the urban core. Recent development activity and increasing supply in this form of higher density development indicate the acceptance of the market to sacrifice large block sizes for more compact living with improved proximity and access.

Goulburn and Marulan need to provide a variety of housing, however, there is a clear need for a continued supply of standard urban residential lots of 700sqm. Supply needs to be maintained to accommodate the general demand.

Appropriate housing also needs to be provided for the ageing population, smaller families and young professionals or first home buyers looking for an alternative to the standard 3 - 4 bedroom residential dwelling. It is recommended that this be accommodated primarily in the existing urban area of Goulburn City with access and proximity to health care, services and businesses.

Additional compact housing delivered throughout Goulburn will provide flexibility for a diversity of the population. Smaller dwellings will enable entry to the market for lower income groups and support smaller households and the retention of young people in the area as they transition from living at home.

Anecdotal evidence gained through the initial community and stakeholder engagement process indicated demand for large lot residential blocks (2ha). These products offer diversity in lifestyle choice. The relatively low subdivision costs associated with creating these lots has resulted in this form of development being the preference of proponents looking to rezone land. Given the current and expected demand for residential land in Goulburn and Marulan it would be anticipated that small volumes of large lot residential land will be absorbed by the market, however, the actual annual demand is difficult to determine.

Given that household sizes are expected to decline and population will continue to grow. It is estimated that an additional 3,359 dwellings will be required to meet demand to 2036. If a 10% surplus is maintained to provide a buffer to accommodate fluctuation in the market, this could be as high as 3,695 dwellings.

For the purposes of analysis, the housing demand has been assumed to be midway at **3,500 dwellings (195 dwellings per year assuming 18 years)**.

2.2.1 Dwelling Approvals

In the 10 years to 2017, Council and private certifiers issued approvals for 1,303 dwellings, which is an average of 130 residences per annum. The majority of approvals were for single detached dwellings (820), of which 105 were located in Marulan. Approvals for multi-dwelling housing accounted for 474 dwellings over the same period, all of which were in Goulburn.

During this 10 year period, Goulburn has experienced significant subdivision activity, particularly in the area around Marys Mount. A total of 1,279 lots have been approved under subdivision applications in Goulburn to 2017. Marulan has also experienced growth in the development of land for housing with an additional 82 lots approved to 2017. In the years between 2009 to 2017 (8 Years) 583 lots were approved in the Marys Mount in Goulburn alone (72 lots per annum).

Dwelling approvals – Infill

Analysis of development approvals for Goulburn over the financial years 2014/2015 to 2017/2018 shows that the rate of infill and intensification has been increasing per annum. The redevelopment of existing residential land has increased from 15 dwellings in 2014/2015 to 75 dwellings in 2017/2018. These redevelopments have typically been on underdeveloped large land holdings within the existing urban area. These have been approved for more compact dwellings or a subdivision with community titles to permit a multi dwelling occupancy of new lots. The redevelopment of land generally correlates with the increasing growth within the Goulburn City.

Table 17 Dwelling Approvals 2007-2017

Dwelling Type	Total Number of Dwellings / Lots		
	Goulburn	Marulan	Total
Detached Dwelling*	715	105	820
Dual Occupancy	90	0	90
Secondary Dwelling	24	8	32
Multi-Dwelling Housing	474	0	474
Subdivision	1279	82	1361

Data sourced from Council. *Includes large lot residential approvals

Large Lot Residential Demand

Large lot residential lots (also referred to as rural residential) are those lots that are not connected to both reticulated water and sewer.

The overall dwelling approval data has not been sensitised for the split between approvals on 1-2ha large lot residential lots, compared to approvals for serviced residential lots. However, a review of Council data suggests that there is reasonable demand for rural residential development on the fringe of the study area. Within the LGA, rural residential development is typically located in areas zoned R5 Large Lot Residential, RU6 Transition and E4 Environmental Living and with

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minimum lot sizes ranging from 2,000sqm to 10 hectares depending on zoning and minimum lot size.

For Goulburn, the majority of recent rural residential development has been on the western and south-western fringe. In the past decade, 290 lots have been created through subdivision of existing properties in this area. Of these, approximately 200 dwellings have been approved or had a development application lodged within two years of lot registration. This represents an approximate uptake of 70 per cent and demonstrates a consistent demand for larger blocks on the urban fringe.

2.2.2 Rents and property sales prices

As of 1 October 2018, the median house sale price for Goulburn NSW (2580) was \$425,000 and the median rental price was \$350 per week (Table 18). For units, the median sale price was \$335,000 and the median rental price was \$245 per week. The median house price has been steadily increasing over the past decade from 2009, doubling in value during this time, as shown in Figure 18. Unit prices have tended to fluctuate, but the overall trend is a similar increase in value, particularly in the past 5 years.

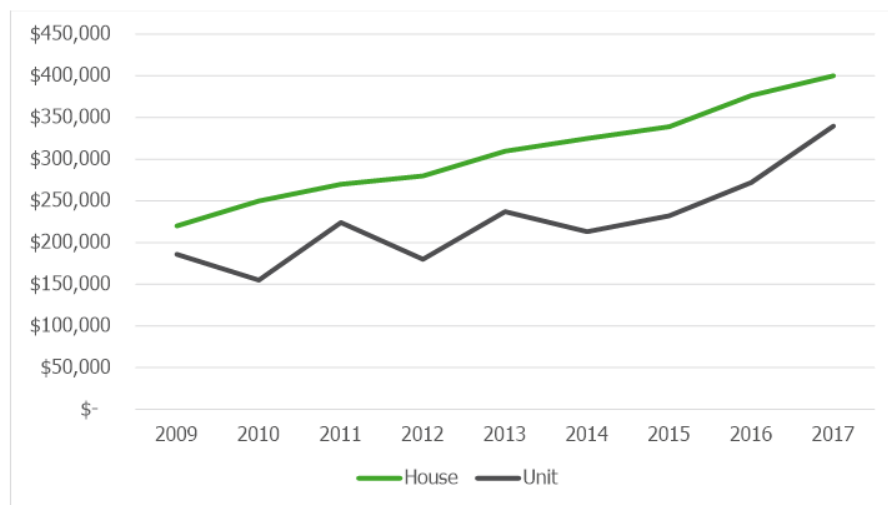
Table 18 Median property price of Goulburn

Buy			Rent		
House					
\$425,000			\$350 PW		
2 BR	3 BR	4 BR	2 BR	3 BR	4 BR
\$332,000	\$395,000	\$530,000	\$288 PW	\$350 PW	\$420 PW
Unit					
\$335,000			\$245 PW		
1 BR	2 BR	3 BR	1 BR	2 BR	3 BR
-	\$260,000	\$350,500	\$190 PW	\$240 PW	\$330 PW

Data supplied by RP Data Pty Ltd trading as CoreLogic, and realestate.com.au

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Figure 18 Median Dwelling Price of Goulburn 2009 to 2017



Data supplied by RP Data Pty Ltd trading as CoreLogic

There have been insufficient sales within the last 12 months (less than 10) in Marulan to determine the median property price for various dwelling types. Consultation with Council indicates there has been strong demand in the Marulan market. This is supported by the population increase of 27% between 2006 and 2016. Continuing to monitor the growth of Marulan will be key to ensuring that sufficient land remains available for urban expansion.

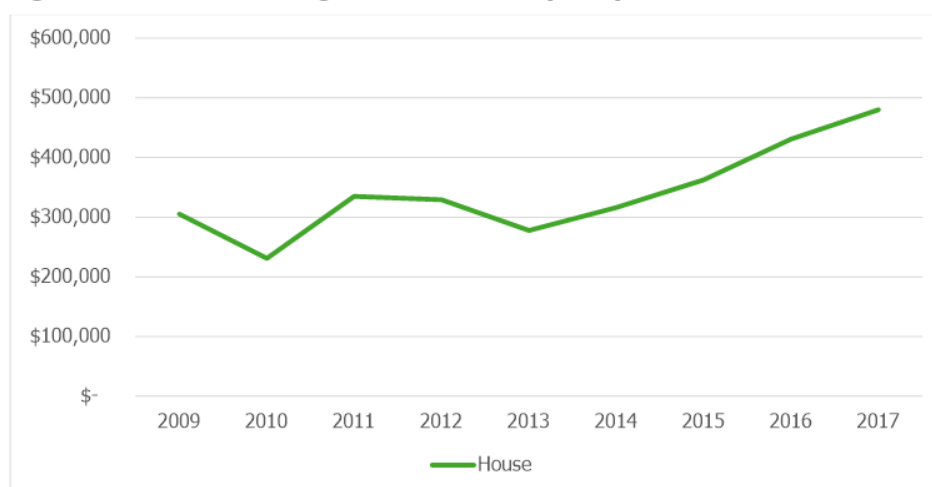
Table 19 Median property price of Marulan

Buy			Rent		
House					
\$460,000			\$390 PW		
2 BR	3 BR	4 BR	2 BR	3 BR	4 BR
-	-	-	-	\$385 PW	-

Data supplied by RP Data Pty Ltd trading as CoreLogic, and realestate.com.au

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Figure 19 Median Dwelling Price of Marulan (2579), 2009 to 2017



Data supplied by RP Data Pty Ltd trading as CoreLogic

2.2.3 Vacancy rates

Goulburn and Marulan currently have relatively low vacancy rates. As of September 2018, Goulburn City had a vacancy rate of 1.1 per cent. Marulan as of September 2018 had a vacancy rate of 1.6 per cent.

The most significant spike in vacancy for Goulburn was in 2015 which corresponds with a spike in approvals. This spike saw vacancy of around 4 per cent. Marulan has had a general vacancy of around 5 to 12 dwellings over the past four years.

2.2.4 Social housing waiting times

As of the 30th of June 2017, NSW Family and Community Services reported the number of applicants for social housing to be 286 general and 9 priority in Goulburn.

Waiting times are significant. Of the various property types, studio and one-bedroom properties have the longest wait time of more than 10 years. Two and four plus bedrooms have wait times of between 5 and 10 years and three-bedroom properties have wait times of 2 to 5 years.

This indicates there is a significant lack of public housing in general, and particularly studio and one bedroom dwellings available within Goulburn. Combined with the increasing number of lone person households, there is expected to be a higher demand for one bedroom dwellings.

Table 20 Waiting times for public housing in Goulburn

Expected waiting time for studio/1-bedroom property	10+ years
Expected waiting time for 2-bedroom property	5 to 10 years
Expected waiting time for 3-bedroom property	2 to 5 years
Expected waiting time for 4+ bedroom property	5 to 10 years

NSW Family & Community Services 2018

2.2.5 Housing for Particular Needs

In the 2016 Census, 1,545 people within the Goulburn City identified as requiring assistance. The largest cohort were elderly persons aged over 85 which made up 48% of the group.

Table 21 Goulburn City need for assistance by age group

Assistance needed by age group (years)	2011			2016			Change 2011 to 2016
	Number	% of total age group	Goulburn Mulwaree LGA %	Number	% of total age group	Goulburn Mulwaree LGA %	
0 to 4	25	1.8	1.8	3	0.2	1.1	-22
5 to 9	66	5.1	3.9	33	2.4	4	-33
10 to 19	68	2.5	2.2	45	1.8	3.4	-23
20 to 59	373	3.5	3.4	269	2.4	3.4	-104
60 to 64	126	10.3	8.4	73	5.8	7.5	-53
65 to 69	94	8.7	7.5	103	8.8	8.7	+9
70 to 74	91	10.8	10.4	122	11.8	12.4	+31
75 to 79	121	17.5	17.3	108	14.4	16.9	-13
80 to 84	167	27.4	26	154	26.6	25.3	-13
85 and over	262	52.3	50.8	252	48	48.7	-10
Total	1,393	6.6	6	1,545	6.9	6.4	+152

Australian Bureau of Statistics, Census of Population and Housing 2016. Compiled and presented in economy.id by .id, the population experts.

2.3 Housing Supply

Goulburn and Marulan have residentially zoned land available for immediate needs, however, Goulburn is set to exhaust the supply of greenfield residential land within the next 2-5 years if current development trends continue. Both settlements have been analysed for their supply in regard to the current demographic and market trends.

A common misconception is that if land is zoned, vacant and undeveloped, then it is available for immediate development. In practice, this may not be the case. In fact, there is often a 'disconnect' between the amount of zoned land and actual delivery of housing lots.

Land that is rezoned for residential development may not necessarily be delivered to the market. This could be due to a variety of reasons, including planning constraints (e.g. statutory requirements, difficulties with infrastructure provision, fragmentation of ownership, etc.), capacity constraints (e.g. bushfire, flooding, slope and landslip, etc.) and commercial pressures. Each has the potential to severely impede the supply response to demand pressures.

The adequacy of land release is therefore crucial for the supply of housing. From first principles the supply of housing directly impacts the price of housing. A constrained supply of land will drive up landowner expectations making site assembly a high risk and high resource activity for developers. This ultimately increases the cost of development.

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Planning controls within the Goulburn Mulwaree Local Environmental Plan 2009 (GMLEP 2009) provide an opportunity for infill development for R1 General Residential and R2 Low Density Residential zoned land. Clause 4.1A allows an exception to the minimum lot size for the subdivision of land for a dwelling, either detached or semi-detached, to create a lot not less than 350sqm. The provision also allows subdivision to create five or more lots with an area of at least 300sqm. R1 and R2 land is the most common zoning of Goulburn, with a corresponding minimum lot size of 700sqm. While infill development is not expected to provide a substantial stream of future housing supply, it does present an opportunity to contain some growth within the existing urban footprint.

Large Lot Residential Supply

Based on the current data, 290 lots have been created in the R5 Large Lot Residential zone in the past ten years in Goulburn. Over this same period, approvals have been granted for 200 dwellings. This indicates that there are at least another 90 vacant lots in the R5 zone. Based on the historic conversion or take up rate (lots to approved dwellings) of 20 per annum, this would suggest around 4.5 years supply of large lots in Goulburn.

Marulan has a much more limited supply of R5 Large Lot Residential zoned land. Supply in Marulan has been driven by demand for standard, serviced residential land, rather than unserviced lots. The constraints to development in Marulan (discussed in more detail later in the Strategy) may contribute to the supply of this form of development.

2.3.1 Current and Planned Housing

As noted above, it is estimated that an additional 3,359 dwellings will be required to meet demand for housing based on anticipated population growth to 2036. If a 10 per cent surplus is maintained to provide a buffer to accommodate fluctuation in the market, this could be as high as 3,695.

For the purposes of analysis, the housing demand has been assumed to be midway at 3,500 dwellings (195 dwellings per year assuming 18 years).

Based on the evidence, which includes stronger growth in Marulan than Goulburn and an assumption that at least a proportion of housing will be delivered in the form of large lot residential development on the urban fringe, the forecast demand scenario as to the distribution of the dwelling and land requirements is summarised in the following table.

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Table 22 Dwelling Supply Assumptions

Area	No. Dwellings	% of total	Minimum Lot Size	Yield dwellings/ha	Land Requirement (ha)
Goulburn Infill	250	7%	-	12-20	-
Goulburn Serviced Residential	2,435	70%	700sqm	8.5	276
Goulburn Urban Fringe (large lot)	360	10%	1-2ha	0.35	1,029
Marulan*	355	10%	700sqm	8.5	53
Other Rural#	100	3%	-	-	-
Total	3,500	100%		-	1,358

*Marulan has experienced strong growth. There are a number of approvals in place that will yield up to 130 residential lots which is up to 6.5 years supply based on current trends.

#Assumption based on change over time.

Goulburn

Goulburn currently accommodates 13,739 dwellings.¹²

The majority of subdivision and development for housing in Goulburn is occurring on existing zoned land in Goulburn at Marys Mount. This area is currently zoned R2 Low Density Residential with a 700sqm minimum lot size. The zoned land has been largely developed with around 91 ha remaining of undeveloped residential zoned land. Of this undeveloped land, approvals are in place for approximately 500 additional lots at Marys Mount. When developed for housing, this represents around two to five years of supply of dwellings.

At present, residentially zoned land is being developed at an average 8.5 dwellings per hectare. If this trend is continued Goulburn will require around 276 hectares of serviced residential land to meet the required demand by 2036.

Taking a conservative approach based on historic approvals data, coupled with the projected change in populations, the LGA will generate demand for an additional 170-195 dwellings per annum. Goulburn is likely to provide the majority of these, historically around 70 per cent, with the balance being provided in Marulan with limited amounts provided elsewhere throughout the LGA.

If an assumed 2,435 of the required 3500 dwellings are provided in Goulburn through greenfield development, around 276 hectares would be required. The higher growth forecast has been used to provide a surplus to ensure there is sufficient urban capable land at any time to provide flexibility to market demands. Sudden shortages can result in price fluctuations which may negatively impact growth. Monitoring of land release and dwelling supply will ensure a steady delivery of land to the market.

¹² ABS Community Profiles 2016.

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An additional 250 dwellings could be provided through further urban infill and intensification. The existing urban areas within the existing Heritage Conservation Area and the land surrounding Hume Street should be prioritised for renewal and intensification. This urban land has been transitioning to a more intensive land use pattern and a number of existing opportunities remain. These areas provide high levels of access to amenities and support a walkable catchment to the CBD and services.

Feedback during consultation supported consideration of an increase in residential height controls. This can be undertaken either by strategically identifying key sites, or through broad zoning and height controls. Given the importance of the role heritage plays in establishing the character of Goulburn, and the impact that a higher built form will have on the surrounding development and the main street itself, a more specific urban design and precinct study should be undertaken to guide medium and higher density development in this area. In the interim, retention of the flexibility to integrate infill development through the GMLEP land use table and DCP, for example looking at car parking rates, private open space, orientation and solar access, could further incentivise the redevelopment of this area.

In addition to serviced residential land, Goulburn provides for housing on large lots that are not connected to reticulated water or sewer. It is difficult to determine the relationship between supply and demand for this form of development. Based on the projected changes in the demographic profile; older population and smaller households size coupled with an average weekly household income below \$80,000 and average house prices around \$460,000 the number of households who could reasonably afford property at the higher end of the market is a small percentage of the total population. However, if 10% of housing is to be provided in the form of these larger lots, consistent with historic trends, this would represent 20 lots per annum. Based on a minimum lot size of 2ha, this equates to the need for 1,029ha of land for up to 360 lots between now and 2036.

Marulan

It is expected that Marulan will continue to grow as projected. If an assumed 355 dwellings are required to meet the estimated demand, around 53 hectares of residential zoned land is required. Marulan currently has around 50 hectares of undeveloped residential land, although approximately 15 hectares of this land is constrained by the proximity to extractive industry.

Marulan will need to ensure that sufficient land is identified and preserved for future urban residential zoning. Given the constraints to development to the south and west and physical barrier created by the Hume Highway to the east, the land area to the north should be reserved for this purpose. Given positive growth experienced by the town over the past 10 years, it will be important to monitor the take-up of existing urban land. Should Marulan's growth accelerate the area in the north will provide sufficient land for future growth.

To support and encourage further population growth in Marulan a diversity of housing products should be supported. The high demand for large lot lifestyle lots could be provided for in the far north of Marulan. Immediately south the Highway is an area of land identified for large lot residential.

2.4 Land use opportunities and constraints

Goulburn and Marulan offer the most logical locations to supply the majority of the LGA's projected growth. These two settlements present a number of opportunities and challenges that need to be understood in order to determine the most suitable locations for future residential development.

As noted in Section 1 Introduction, the study areas have been divided into 24 precincts. This enables a more detailed analysis of the physical and environmental constraints to development as well as the opportunities for housing.

Environmental and physical constraints analysis was undertaken using GIS with data sourced from Council and NSW Government Departments to identify high level constraints in the context of the Strategy area. The constraints considered are listed in the following table and detailed in **Appendix D**. Key constraints have been outlined at a high level for both Goulburn and Marulan to provide an overview.

The constraints that may impact on the orderly release of land for urban development include the following:

Table 23 Key Constraints

Constraint	Application/comment
Topography	Sloping land can be a significant environmental constraint which impacts upon and influences soil erosion, drainage, water quality and bushfire hazard. Just as importantly, it has implications with respects to the provision and capital cost of infrastructure, roads and social services. Slope analysis was used as a mapping tool to identify topographic constraints and shows that the majority of the study boundary for Goulburn and Marulan is unaffected by slope greater than 18%. The eastern boundary of the Goulburn study area has the steepest slopes, as well as the northeast corner.
Flood Prone Land	<p>Flood prone land presents a significant constraint to development as it has implications with respect to safety, the capital cost and provision of infrastructure, roads and the location of highly sensitive land uses such as schools and aged care facilities (due to evacuation).</p> <p>The flood planning level has traditionally been the 1%AEP (a flood event with a 1 in 100 chance of occurring in any given year). Given the changing climate and potential impacts on catchment hydrology, it is prudent to consider the Probable Maximum Flood (PMF) when assessing the suitability of sites for different land uses. PMF is particularly relevant when considering sensitive uses. Risk factors such as evacuation routes are also important planning considerations, as an area of land may be isolated by floodwaters even though it is not inundated.</p> <p>The Goulburn flood map (within the LEP) is generally consistent with the Wollondilly and Mulwaree Rivers Flood Study 2016. This study provides a thorough explanation of flood planning considerations and has been used to determine the physical constraints for Goulburn in the 1%AEP flood event.</p>

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Constraint	Application/comment
	<p>The Flood maps and the Wollondilly and Mulwaree Rivers Flood Study 2016 clearly articulate the flood impacts for Goulburn. Areas east of the rail station are the most effected. All land which interfaces with the main water bodies should be avoided or carefully considered if proposed for residential development.</p> <p>Council has engaged GRC Hydro to prepare a Flood Plain Risk Management Plan for Goulburn including overland flow flooding. The overland flow assessment was not available during the Housing Strategy preparation however, will be considered in subsequent stages of the development process.</p>
Watercourses	<p>Watercourses throughout the Goulburn and Marulan investigation areas have been mapped according to the Strahler System of ordering watercourses. Classification under this system determines the width of riparian buffer required, and is explained in the ELA report at Appendix E.</p> <p>Regardless of watercourse classification, a buffer of 100m is required from any on site effluent system to any watercourse within the Sydney drinking water catchment. This poses a constraint to large lot residential (un-serviced lots) land use in some fringe precincts, particularly South Marulan, Brisbane Grove and Mountain Ash (refer to individual precinct summaries).</p>
Sydney Drinking Water Catchment (SDWC)	<p>Almost all of Goulburn Mulwaree LGA is within a SDWC. A map of the SDWC can be found at: https://www.watarnsw.com.au/_data/assets/pdf_file/0004/55975/Fact-sheet-and-map-Sydney-drinking-water-catchments.pdf</p> <p>Development must have a neutral or beneficial effect (NorBE) on water quality as per SEPP (Sydney Drinking Water Catchment) 2011.</p> <p>WaterNSW has developed strategic land and water capability assessments (SLWCA) for land in the catchment. Factors such as slope, soil erodibility, permeability and depth, distance to watercourse and vegetation cover are assessed to determine land and water capability for different land use types. Refer to Appendix D for further information on SLWCA mapping.</p> <p>Key constraints to residential land use are:</p> <ul style="list-style-type: none"> » Land management – including proper storage and disposal of chemicals and pesticides, control of weeds and pest animals, maintaining groundcover to prevent erosion, and protection and restoration of native vegetation. » Stormwater – including water sensitive design during and post construction to prevent sediment and other contaminants entering waterways. » Wastewater – including on-site treatment and disposal systems. These require a 100m buffer to watercourses.

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Constraint	Application/comment
	These constraints are particularly applicable to large lot residential land use. Poorly maintained 'rural-res' can also negatively affect adjoining farmland.
Biodiversity	<p>The main objective of identifying sensitive biodiversity is to maintain terrestrial biodiversity by protecting native fauna and flora whilst encouraging the conservation of habitats. Biodiversity has already been recognised by Council as a significant constraint to development.</p> <p>The data used for biodiversity in the constraints mapping is in three forms:</p> <p>High Environmental Value (HEV) – this is the data provided by the Office of Environment and Heritage (OEH). HEV data has not been validated for all the precincts.</p> <p>Ecological Australia (ELA) Validated Vegetation - The accuracy of the HEV mapping was questioned during the first Public Exhibition. As a result, OEH and ELA undertook a targeted rapid visual validation in specific areas within the urban fringe observable from public roads.</p> <p>Threatened Ecological Communities (TEC) – ELA identified and validated a number of Endangered Ecological Communities (EEC) and have also mapped these areas.</p> <p>OEH have advised that biodiversity constraints for any greenfield release areas need to be validated, as further constraints that are not obvious without field validation may be present. Additional validation is required by the proponent to inform the preparation of a planning proposal.</p> <p>The work undertaken by ELA is included in Appendix E.</p>
Strategic Agricultural Land and Land and Soil Capability	<p>Agriculture is an important land use within the region contributing significantly to regional economic performance.</p> <p>The constraints mapping identified a parcel of Biophysical Strategic Agricultural Land (BSAL) identified under the State Environmental Planning Policy (Mining, Petroleum Production and Extractive Industries) 2007. The land affected runs from the Wollondilly River, north across Chinamans Lane to Crookwell Road.</p> <p>Advice from DPIE confirms that the BSAL mapping applies only to development considered under the SEPP.</p> <p>However, the BSAL is based on the underlying land classification mapping provided by the Office of Environment and Heritage and available for the whole of NSW. The specific land is Class 3 being in the highest category (classes 1-3) land capability mapping. Wherever possible this land should be retained for agriculture.</p>
Existing and Potential Mineral Resource Areas	<p>Extractive industries are an important land use within the region, particularly for Marulan.</p> <p>A Mineral Resource Audit of the LGA (Geological Survey of NSW, 2015) identified a three types of referral areas:</p> <ul style="list-style-type: none"> » Identified Resource Area (active resource extraction) » Potential Resource Area (potential future extraction)

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Constraint	Application/comment
	<p>» Transition Area (adjacent to Identified Resource Area)</p> <p>The primary constraints to residential development are the Kingsdale Potential Resource Area (west and north of Goulburn) and the Lynwood Quarry and the associated Transition Area (immediately west of Marulan town).</p> <p>Development within these areas could adversely affect or be affected by current and/or future resource development operations. It is noted that mineral resource extraction at Kingsdale is unlikely to be supported by Council in close proximity to the Sooley Dam. Therefore, residential development at the eastern extent of this potential resource area may not be precluded by this constraint in the long term.</p> <p>The <i>State Environmental Planning Policy (Mining, Petroleum Production and Extractive Industries) 2007</i> requires a compatibility test to be undertaken by council planners when assessing any proposed development in the vicinity of existing mines, quarries and petroleum production facilities or resources identified as being of state or regional significance.</p> <p>Any proposed zoning changes or developments that may prohibit or restrict current and/or potential future operations in these areas should be referred to Resources & Energy Division of NSW Trade & Investment.</p>
Bushfire	<p>In planning for the release of land for urban development purposes, it is important to take into account the potential threat from bushfire. Bushfire hazard can be a major constraint to future residential development given the likelihood for bushfire risks. The vegetation type, topography and overall slope of the land determines the level of bushfire hazard.</p> <p>The Rural Fire Service (RFS) has released updated bushfire mapping now included in Appendix D. It is noted that all of the land outside the urban areas is bushfire prone.</p>
Aboriginal Cultural Heritage	<p>All areas indicated for development should refer to the Goulburn Mulwaree LGA Aboriginal Heritage Study 2012 to understand site specific heritage matters. As with other detailed assessment requirements, heritage assessments will need to be prepared prior to development of land.</p>
European Heritage	<p>Heritage is an important part of the urban fabric of Goulburn. In 2018 a review of the 1983 Heritage Study was completed. The GMLEP includes Heritage Conservation Areas (including in the Goulburn City Centre) and individual Heritage Items. Any development in the Conservation Areas or in the vicinity of a Heritage Item must consider the potential impact on heritage.</p>
Key Existing Land Use	<p>A number of key land uses and/or mineral resources have been identified as constraints to future urban development. These include:</p> <p>Goulburn Rifle Range</p>

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Constraint	Application/comment
	Wakefield Park Speedway
	Abattoir (Southern Meats Pty Ltd)
	Goulburn Airport
	Sewerage Treatment Plants at Goulburn and Marulan
	Waste management Facilities at Goulburn and Marulan
	Intensive Agricultural Development at Marulan
	Gas Pipeline and High Voltage Transition lines
	Hume Highway
	Mineral Resources and Extractive Industries
	Haulage Routes for extractive development
	Hume Highway
	Police Driver Training Centre
	Goulburn Speedway and Motorcross
	In some instances, these constraints require a buffer, which would trigger an additional level of development assessment for certain development. There will be circumstance where the buffer will be an exclusion for certain uses.

The key constraints have been overlayed on the Goulburn and Marulan maps as shown in the following figures.

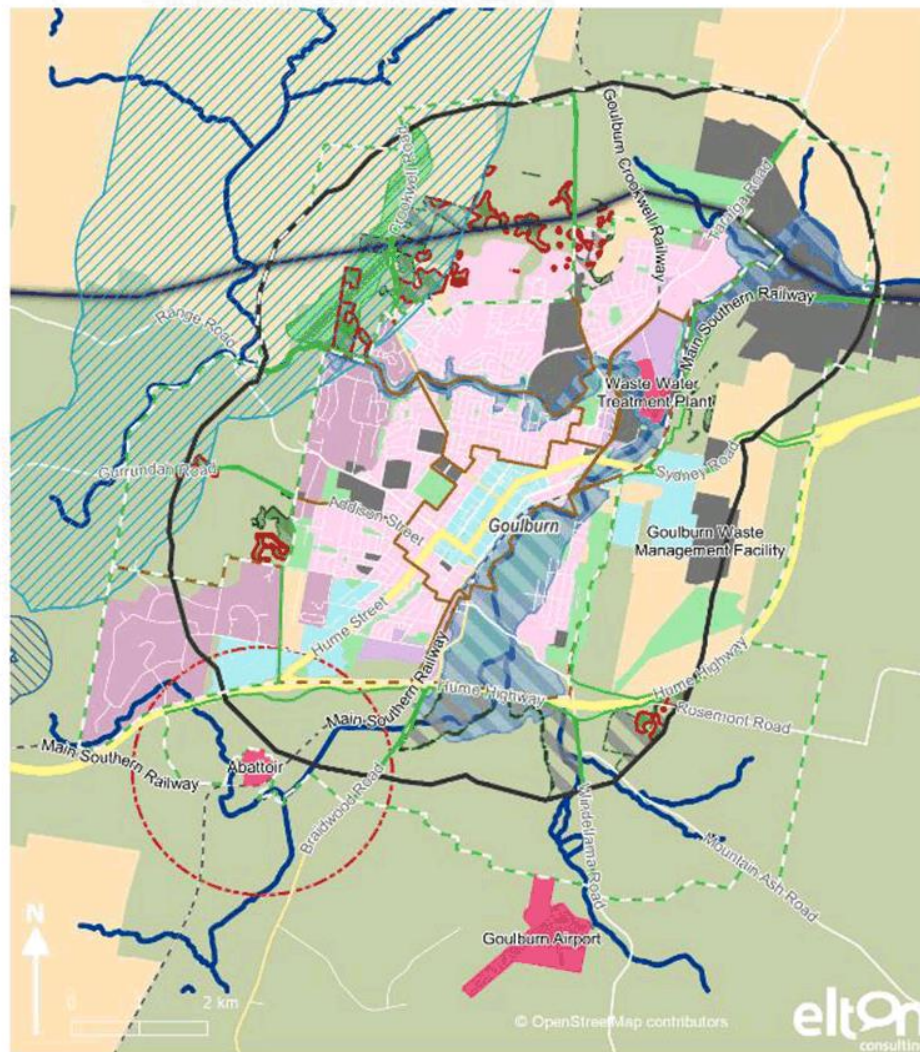
The draft Strategy included a section outlining the key constraints. This has been updated and can be found at **Appendix D**.

Constraint Maps

The key constraints for Goulburn and Marulan are identified in the following Figures.

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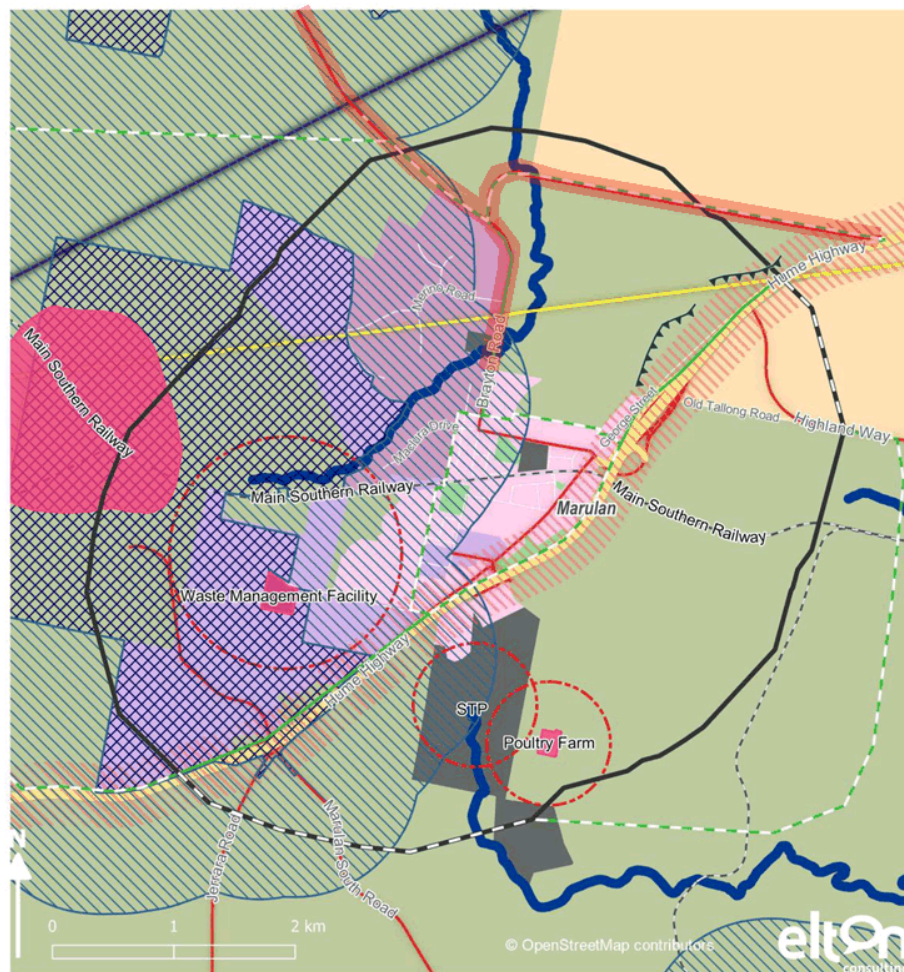
Figure 20 Goulburn Constraints



Legend

- | | | |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------|
| Land Zoning
Urban area
Business area
Non-urban environmental protection
Non-urban environmental protection
Light Industrial
Rural residential
Infrastructure
Rural area
Infrastructure | Constraints buffers
Land use constraints
Flooding
Riparian buffers
4th order (40m)
Strategic agricultural land | ELA Vegetation
TEC
Other Vegetation (ELA)
Validated (ELA)
Gas pipeline
Mines and quarries
Transition Area |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------|

Figure 21 Marulan Constraints



Legend

- | | | |
|------------------------------------|-------------------------------|--------------------------|
| Land Zoning | Constraints buffers | Gas pipeline |
| Urban area | Land use constraints | Mines and quarries |
| Non-urban environmental protection | Riparian buffers | Transition Area |
| Urban area | 4th order (40m) | Ridge line |
| Rural residential | 250m from Hume Highway | Haulage route and buffer |
| Public Recreation | Electricity transmission line | |
| Rural area | | |
| Infrastructure | | |

2.4.1 Water and Sewerage Supply

The population and economy of Goulburn Mulwaree continues to grow placing increasing demands on water supplies. With the addition of the Highlands Source Pipeline to the existing Pejar Dam and Sooley Dam sources, a long term secure supply is available to accommodate the anticipated growth in Goulburn over the life of the Strategy. The water supply for Marulan is via extraction under license from the Wollondilly River and is satisfactory to supply reticulated water as the town grows.

While there are no identified capacity constraints to the supply of water for development, the cost of servicing new release areas is dependent on the proximity to existing mains and that point at which the new infrastructure will connect to the mains network. Topography also impacts the water and sewer serviceability, particularly areas with steep terrain. Detailed infrastructure design and assessment will need to be undertaken to support the extension of either water or sewer services in Marulan and Goulburn.

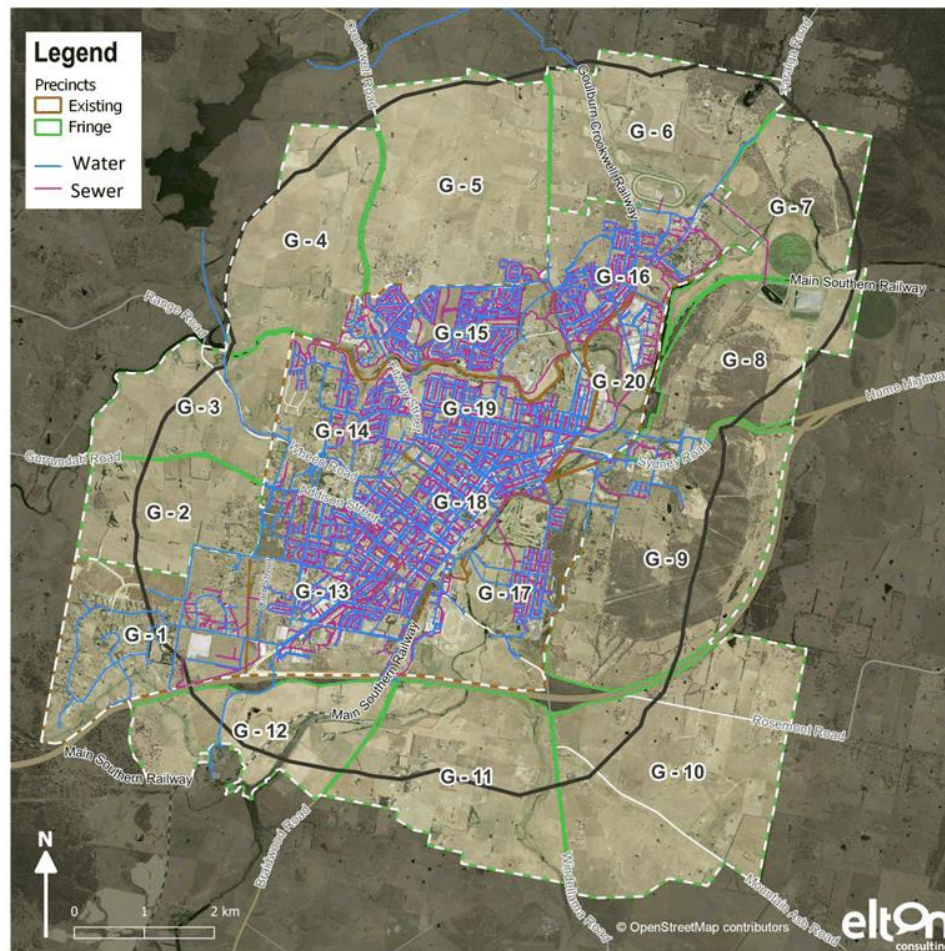
Council has recently upgraded the Goulburn Sewerage Treatment Plant to accommodate up to 30,000 equivalent persons (EP) with capacity to 40,000 EP with augmentation.

An upgrade concept plan for Marulan Sewerage Treatment Plant has recently been prepared with completion of the upgrade scheduled to occur within the next five years ensuring on-going capacity in the network to accommodate anticipated future growth in the town.

The capacity of the water and sewer infrastructure is considered in more detail at the precinct level based on information provided by Council engineers. Further network analysis is necessary to determine the relativity of servicing constraints, particularly between west Goulburn (simpler for water, more difficult for sewer), north Goulburn (more difficult for water, simpler for sewer) and South Goulburn (both water and sewer constraints).

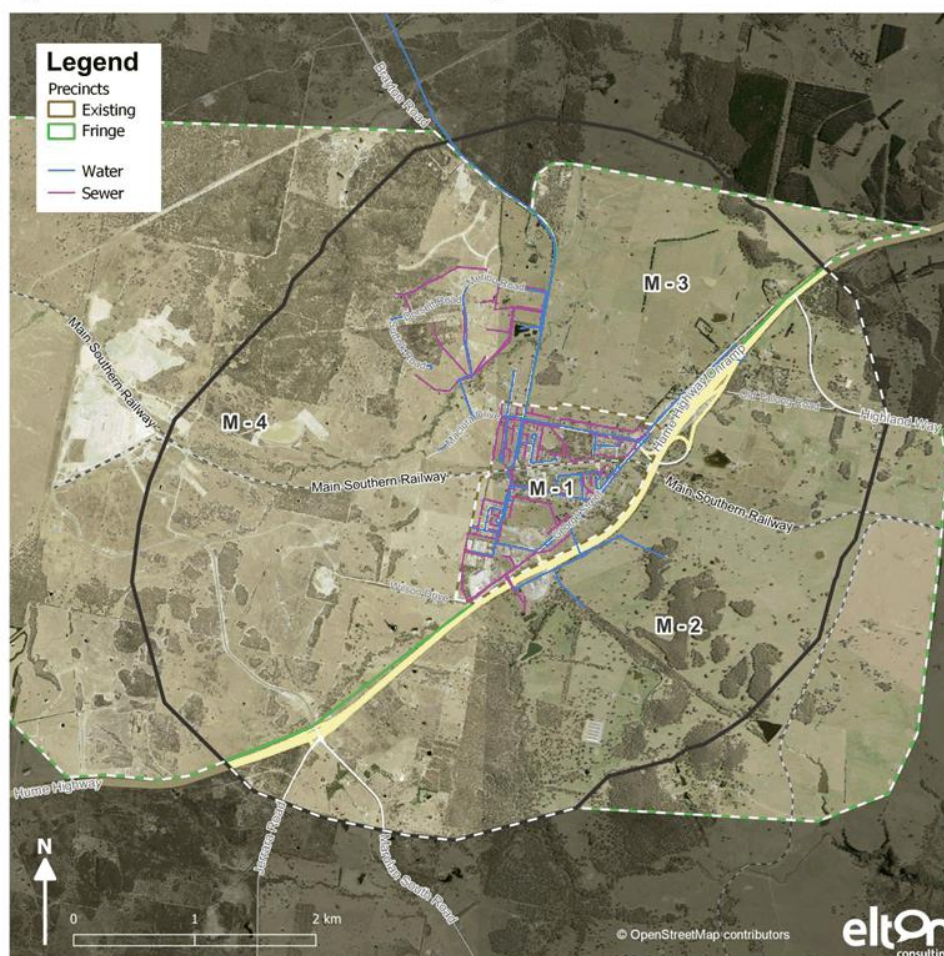
The extent of the existing networks is illustrated in the following figures.

Figure 22 Goulburn Water and Sewerage Network



Goulburn Mulwaree Council GIS data.

Figure 23 Marulan Water and Sewerage Network



Goulburn Mulwaree Council GIS data.

2.5 Application of the evidence base

The analysis and application of the evidence base has been undertaken at precinct level. As identified in Section 1 Introduction, the study area has been divided into a number of individual precincts. These are broadly grouped as being Goulburn Urban, Goulburn Fringe and Marulan.

The primary objective of the Strategy is to identify land that is both capable and suitable for the delivery of serviced residential land for housing.

The LGA is dominated by single detached dwellings, this is particularly the case in Marulan. The population and demographic data tends to indicate that there will likely be a need for a mix of dwelling typologies to be delivered over the next two decades. Goulburn is already seeing an increase in higher density development close to the City Centre. This form of infill development, close to services and transport should be encouraged. However, like all residential development, it is not without constraints, in particular the Heritage Conservation Area.

The initial round of consultation undertaken by Council and the subsequent public exhibition highlighted the desire within the community for a supply of large lot residential land for housing. The most inefficient form of residential development in terms of the demand on land resources, it is none the less part of the peri-urban character of Goulburn.

Land capability

Land capability, for the purposes of this Strategy is that land that could accommodate some form of housing. This might be serviced residential land or it could be large lot residential.

Land suitability

It does not follow that all land that is capable of being developed is also suitable for development. The constraints mapping discussed above allows for a particular area to be identified as suitable to meet the housing needs of the LGA.

Protection of Future Urban Land

One of the key issues arising from the evidence base is the limited availability of suitable areas for urban residential land release due to the existing constraints in both Goulburn and Marulan. Both settlements are highly constrained to the east and south and in the case of Marulan also the west.

The GMLEP already includes an RU6 Transition zone, the objective of this zone is to provide a transition between the urban and rural land uses. Much of this land has also been identified as some of the land less constrained and therefore better suited for urban development. In any interface between urban and rural land, managing land use conflict will be key.

2.5.1 Criteria of identification of greenfield sites

The identification of greenfield sites for future development is key to the Strategy given that over 2,000 dwellings will need to be accommodated by 2036. In essence, the focus on land identification for serviced residential land was:

- » The ability to provide housing to the meets the needs of the population
- » Focus on areas that have capacity in existing infrastructure and align with efficient and economical infrastructure delivery

In addition to constraints mapping, consideration has been given to objectives and principles consistent with the strategic and statutory context of each settlement including the proximity to the city or town centre, the rail station, the Hume Highway as a physical constraint, compatibility of surrounding zones and land uses (particularly in the southern areas around Goulburn). These criteria are outlined below and were used to inform the focus and consideration of land suitable for urban expansion as part of the Strategy.

Location

- » the site is within the area identified for urban expansion in the Housing Strategy adopted by Council
- » the site location supports a logical and contiguous development with the existing settlements of Goulburn and Marulan.
- » the site is within the urban fringe identified by the Housing Strategy
- » the site can be connected to water and sewer infrastructure
- » the site has minimal or limited impact on matters of biodiversity or heritage
- » the site will not result in the fragmentation of biodiversity corridors
- » the site is not identified as being subject to flooding
- » the proposal will preserve and enhance riparian corridors as open space networks and utilise for active travel connections. Development around riparian corridors is to be in accordance with the guidelines for waterfront land defined by the NSW Office of Water DPI
- » avoid residential development on the southern/eastern side of the Hume Highway
- » the proposal considers the requirements of Primary Production and Rural Development SEPP

Housing

- » housing contributes the required demand identified in the Housing Strategy for the Goulburn Mulwaree LGA
- » the proposal delivers appropriate housing to meet the demographic needs of the region
- » development reinforces and enhances any existing residential character
- » development will contribute housing affordability, choice and diversity appropriate for the anticipated demographic profile of the LGA

Use

- » development will not result in land use conflicts particularly with agriculture and primary industries
- » minimise disturbance or conflict with State Significant Quarry Areas and haulage routes.

2.5.2 Previously Identified Sites

As part of the development of the Strategy, consideration has been given to 38 individual requests for land to be rezoned since 2009. These included Planning Proposals that were considered and deferred by Council and representations in submissions and letters.

In the first instance the sites were mapped and a set of criteria were established to provide an assessment tool by which sites could be considered. Most of these sites occurred within or close to the urban fringes of Goulburn and Marulan, however, the majority were seeking a land use zone that would allow subdivision for lifestyle lots, un-serviced and having an area of 2ha or more. The criteria identified above were also included in the assessment of 38 sites previously identified.

Although the initial scope of the Strategy addressed urban land and the supply of additional land for residential purposes on the fringe of the urban areas of Marulan and Goulburn, it is evident that larger lots close to Goulburn provide an important element of housing diversity.

Proposals which fall outside this area were not considered for any form of residential development, however Council could consider additional criteria that would need to be addressed prior to Council considering a Planning Proposal.

Identification and assessment of each these sites was undertaken as part of the Housing Strategy process. The original Site Assessment document forms part of the Consultation Report under separate cover. It should be noted that in some instances some of these sites have been reconsidered in individual precinct analysis. In circumstances where specific issues with the Key Sites were identified in submissions received during the public exhibition, these have been also been addressed in the Consultation Report.

2.5.3 Framework for Considering Future Planning Proposals

The above criteria should also be adopted by Council to provide clear direction for determining whether a planning proposal for residential development may have merit. Specifying such criteria permits flexibility for Council to respond to unforeseen issues or opportunities over the life of the strategy.

As Council monitor the delivery of housing to Goulburn and Marulan it may become evident there is a shortfall. Additionally, there may be significant unforeseen barriers to development that are beyond the scope of this strategy.

Additional Criteria for R5 Large Lot Residential Development

In addition to addressing the Ministerial Directions and information required to be provided in a Planning Proposal as set out by the Department of Planning and Environment in the Guideline to Preparing Planning Proposals, the following criteria must be applied for identification of R5 Large Lot Residential Development.

- » The development is identified in the Strategy as an opportunity area for Large Lot Residential Development
- » The development will not undermine future residential land opportunities. It should be located on land that is not, or unlikely to be suitable for general residential land at some point in the future.
- » The development can be managed to avoid land use conflict. Large Lot development should have regard to the surrounding agricultural land use and must provide a buffer to agricultural land.
- » The site is unconstrained by flooding, as it is above the flood planning level of the 1 in 100 ARI. The area is not affected by flooding and has unconstrained flood free access out of the property and/or locality.
- » The lots can be connected to the existing road network by sealed road access. The area can be connected to the existing sealed road network by sealed road access and is fully serviced by a sealed road.
- » The resulting residential development will not adversely impact on the groundwater system. Any development, and in particular un-serviced development, needs to demonstrate that it will not adversely impact on the groundwater system.
- » The need for the additional lots can be justified in terms of supply and demand

- » The site be managed to reduce bushfire hazard and provides for evacuation in accordance with the NSW Planning for Bushfire Protection Guideline.
- » The development should avoid class I-III agricultural land and avoid Important Agricultural Land (subject to mapping being completed for the LGA)
- » The development will have access to a sustainable water supply. The proposed lot must demonstrate the provision of a sustainable water supply. A sustainable water supply can be achieved by various means including the provision of reticulated water, roof water catchment or accessing water from a river, lake or aquifer in accordance with the Water Management Act 2000. Department of Primary Industries – Water 'How much water do I need for my rural property' provides one methodology to calculate a required supply.

2.5.4 Housing supply gaps

The current housing stock is typically 3-4 bedroom single detached dwellings. This lack of diversity of housing typologies has already led to issues including:

- » choice and housing affordability
- » suitability of housing for older people to down size
- » limited opportunity to age in place, and
- » difficulties for first home buyers looking to enter the market at a lower entry point

The Strategy includes some priorities in relation to addressing these gaps in Section 4 and implementation in Section 5.

2.5.5 Building typologies

Housing typology in the LGA lacks diversity, with single detached dwellings on larger lots being the dominant form of housing.

A range of housing types and sizes help ensure people can more readily meet their housing needs throughout their lifecycle, remaining in the area where they have existing networks. This mix contributes to the social vibrancy and character of towns and cities.

To continue to meet the needs of the existing and future community, the Council will need to ensure a greater range of housing types in different built forms is encouraged and developed.

Through the constraints and opportunities analysis, including environmental constraints such as flooding, and biodiversity, and proximity to the town or city centre make some areas more suitable than others.

For example, within identified and future heritage conservation areas, the likely increase in residential options will predominantly come from sensitive alterations and additions; secondary dwellings; and potentially dual occupancies.

In and around the Goulburn City Centre higher density development is considered more suitable in the form of low rise residential flat buildings, shop top housing and mixed use developments, tapering down to manor houses, villas and townhouses, and single dwellings.

The number of laneways in the existing urban precincts in Goulburn present an opportunity to support dwellings with access at the front and rear of these lots.

The following table details examples of the low, medium and high density building typology options.

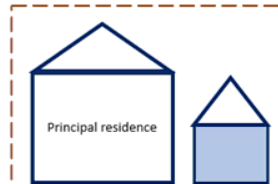
Table 24 Dwelling typologies

Single dwellings		
A detached building containing only one dwelling		
Two attached dwellings		
One building with two attached dwellings		
Terraces		
Three or more attached dwellings which have a frontage to the street		
Dual occupancy		
Two dwellings on one lot of land that are either attached to each other or detached, but does not include a secondary dwelling		
Secondary dwellings		

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A self-contained dwelling that:

- (a) is established in conjunction with another dwelling (the principal dwelling), and
- (b) is on the same lot of land as the principal dwelling, and
- (c) is located within, or is attached to, or is separate from, the principal dwelling.



Multi-dwelling houses (terraces or townhouses and villas)

Three or more dwellings on one lot of land where:

- » each dwelling has access at ground level
- » no part of a dwelling is above any part of any other dwelling, and,
- » dwellings face and generally follow the alignment of one or more public roads.



Manor houses

A building containing 3 or 4 dwellings, where:

- » Each dwelling is attached to another dwelling by a common wall or floor, and
- » At least 1 dwelling is partially or wholly located above another dwelling, and



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- » The building contains no more than 2 storeys (excluding any basement).

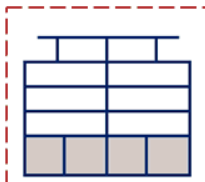
Residential flat buildings

A building containing 3 or more dwellings, but does not include an attached dwelling or multi dwelling housing



Shop top housing

One or more dwellings located above ground floor retail premises or business premises



Source: Department of Planning and Environment, 2017 'The Low Rise Medium Density Design Guide'

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Other important types of residential accommodation include:

Boarding houses

A building that:

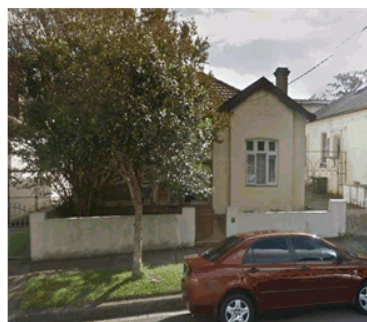
- (a) is wholly or partly let in lodgings, and
- (b) provides lodgers with a principal place of residence for 3 months or more, and
- (c) may have shared facilities, such as a communal living room, bathroom, kitchen or laundry, and
- (d) has rooms, some or all of which may have private kitchen and bathroom facilities, that accommodate one or more lodgers, but does not include backpackers' accommodation, a group home, hotel or motel accommodation, seniors housing or a serviced apartment.



Group home

Means a dwelling:

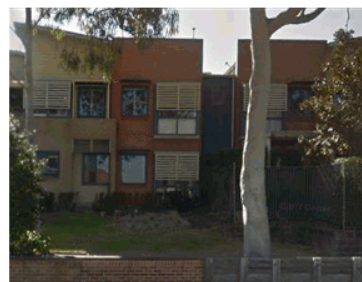
- (a) that is occupied by persons as a single household with or without paid supervision or care and whether or not those persons are related or payment for board and lodging is required, and
- (b) that is used to provide permanent household accommodation for people with a disability or people who are socially disadvantaged, but does not include development to which State Environmental Planning Policy (Housing for Seniors or People with a Disability) 2004 applies.



Seniors housing

A building or place that is:

- (a) a residential care facility, or
- (b) a hostel within the meaning of clause 12 of State Environmental Planning Policy (Housing for Seniors or People with a Disability) 2004, or
- (c) a group of self-contained dwellings, or
- (d) a combination of any of the buildings or places referred to in paragraphs (a)–(c), and that is, or is intended to be, used permanently for:
 - (e) seniors or people who have a disability, or
 - (f) people who live in the same household with seniors or people who have a disability, or
 - (g) staff employed to assist in the administration of the building or place or in the provision of services to persons living in the building or place, but does not include a hospital.



Source: *Standard Instrument LEP 2018 (NSW)*

2.5.6 Capacity of the land use controls

The GMLEP includes two primary residential zones; R1 General Residential and R2 Low Density Residential. The GMLEP also includes an R5 Large Lot Residential zone which typically applies to rural residential and lifestyle lots with a range of lot sizes. In Goulburn, this land is to the west and in Marulan to the north. The GMLEP also includes minimum lot sizes for subdivision for the erection of a dwelling in these zones, both set at 700sqm. As highlighted earlier, the GMLEP also includes provisions to encourage diversity in residential accommodation through clause 4.1A.

The GMLEP also applies the RU6 Transition zone, this zone skirts the urban fringe areas of both Goulburn and Marulan and is provided to protect these areas from fragmentation and manage the interface between the urban and rural land uses. This land does not contribute to the current residential land supply.

Typically, a review of the capacity of the existing housing controls includes identifying the opportunity for infill development on vacant residential land and the potential for further subdivision on land zoned for residential development, in the case of Goulburn and Marulan R1 General Residential and R2 Low Density Residential.

As identified above, there is limited opportunity in Goulburn to deliver more than around **five years of supply under on currently available zoned land**. Marulan, by contrast has a sufficient supply of land available for development in the short to medium term.

In terms of infill, the market does not act in the same manner in regional areas as is the case in the metropolitan centres where greenfield land resources are scarcer, highly constrained and costly to deliver. Infill development is driven by land value, access to transport and community infrastructure and the ability for significant uplift. Therefore, while there remains capacity in the planning controls to accommodate a significant amount of higher density infill development, making assumptions as to the take up of this is difficult.

Goulburn has seen a steady increase in multi dwelling housing and in particular a number of developments in close proximity to the city centre. Such development is facilitated, to a significant degree by the broad nature of the permissible uses allowed within the R1 General Residential zone and also clause 4.1A (refer **Appendix C**).

The objective of clause 4.1A is to encourage housing diversity without adversely impacting on residential amenity and targets attached and semi-detached housing on smaller lots. Despite the minimum lot size of 700sqm the clause allow subdivision to create lots to 300sqm.

While the provisions of clause 4.1A provide flexibility in the R1 General residential zone, they apply equally to the R2 Low Density Residential zone. In fact, there is very little difference aside from an objective in the R2 Low Density Residential and the addition of Retail Plant Nurseries and Residential Flat Buildings as permissible uses in the R1 zone and excluded in the R2 the two zones are identical.

The R5 Large Lot Residential zone provides for larger dwellings on larger, typically un-serviced lots and range in size from 2,000sqm on the western fringe of Goulburn around Wheeo Road and increasing to 2 hectares in the area around Ducks Lane. In Marulan, the minimum lot size in the R2 land around Merino Road is 2,000sqm. This land is fully serviced and despite the minimum lot size, lots are typically 1-2 ha.

An overview of the residential zones and their corresponding objectives are highlighted below. A comparison of the land use tables between the three residential zones is provided in **Appendix C**. It is important to note that there is little that differentiates the R1 and R2 zones in terms of land use and minimum lot size. Rather, the zoning represents only the differentiation between the older part of the Goulburn urban area and the more recently developed land around Marys Mount.

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Given the opportunities identified in terms in-fill development closer to the centre of the city, coupled with greater opportunity for redevelopment of older housing stock, consideration should be given to providing greater definition between the zones through amendments to the GMLEP land use tables and local provisions.

R1 General Residential zone

This zone is applied to the central and older parts of Goulburn with the river acting as the physical edge of the zone in the north. The residential area of Marulan is zoned R1 General Residential with R5 Large Lot Residential to the north.

The objectives of the zone include:

Objectives of zone

- » to provide for the housing needs of the community
- » to provide for a variety of housing types and densities
- » to enable other land uses that provide facilities or services to meet the day to day needs of residents
- » to maintain the economic strength of commercial centres by limiting the retailing of food and clothing.

The Minimum lot size for the erection of a dwelling in the R1 zone is 700sqm. Additional provisions apply that enable smaller lots to be created using dual occupancy, multi dwelling housing and strata title controls as will as clause 4.1A of the GMLEP (Refer **Appendix C**).

R2 Low Density Residential Zone

As noted above, the Low Density Residential zone is almost identical in its objectives and land use table to that of the R1 General Residential zone.

Objectives of zone

- » to provide for the housing needs of the community within a **low density residential environment**
- » to enable other land uses that provide facilities or services to meet the day to day needs of residents
- » to maintain the economic strength of commercial centres by limiting the retailing of food and clothing.

The Minimum lot size for the erection of a dwelling in the R1 zone is 700sqm. Additional provisions apply that enable smaller lots to be created using dual occupancy, multi dwelling housing and strata title controls as will as clause 4.1A of the GMLEP in the same manner as they apply to the R1 zone (Refer **Appendix C**).

R5 Large Lot Residential zone

The large lot residential zone, again, has a similar land use table to the other residential zones, although typically provides for larger dwellings on larger block of land.

Objectives of zone

- » To provide residential housing in a rural setting while preserving environmentally sensitive locations and scenic quality.
- » To ensure that large residential lots do not hinder the proper and orderly development of urban areas in the future.

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- » To ensure that development in the area does not unreasonably increase the demand for public services or public facilities.
- » To minimise conflict between land uses within this zone and land uses within adjoining zones.
- » To facilitate and promote an increased range of residential opportunities by providing for low intensity residential development compatible with the rural characteristics of the locality.
- » To encourage subdivision of land that is consistent with the constraints and opportunities of the land.

Despite being an inefficient land use, this form of development is not uncommon in regional areas. The Minimum Lot Size for land in the R5 zone ranges from 2,000sqm to 2ha.

Section 3 – Precincts

3 Precinct constraints and opportunities

As identified in Section 1, in order to enable the consideration of both Goulburn and Marulan is sufficient detail, the study area has been divided into precincts.

A snapshot has been prepared for each precinct and includes a description, key character and planning controls, constraints and opportunities and key recommendations.

Residential development opportunities have been identified in some precincts. Development opportunities include the area that is considered most suitable for either serviced residential development or large lot residential development.

Serviced residential development opportunities are identified by an orange and grey hatch. The boundaries are estimated based on the constraints mapping undertaken throughout the project at a strategic level (further detailed site investigations may be required at the planning proposal stage). Typically, serviced residential land will have a minimum lot size of 700 sqm. The development yield for these areas is an estimate. A conservative 8.5 lots per hectare has been applied. These areas will need to be rezoned prior to development. The mechanisms for delivering the land is identified in Section 4 and involves the preparation of a planning proposal to rezone land prior to any development occurring.







In addition to serviced residential land, there are some areas that have been identified as suitable for large lot residential development. These areas are marked yellow and are typically 2ha but could be considered as smaller lots if serviced (with reticulated town water and sewer services) down to 4000 sqm.

Areas identified as grey in the development opportunities precinct maps are areas considered as being potentially suitable for residential development post 2036 or at such a time when the supply of residential lots under the current provisions of this Strategy are exhausted.









The precinct snapshots are summaries and should be read with **Section 2.4 land use opportunities and constraints** and information in **Appendices E and F**.

The legend for the constraints is explained in the following table.








Constraints and Opportunities Mapping Legend

Legend	Description
Land use	
 Urban area	Residential land
 Non-urban environmental protection	E zones
 Rural residential	
 Recreation	Land zoned RE1 Public Recreation or RE2 Private Recreation
 Infrastructure	Special purpose areas such as schools, sewerage treatment, correctional centre.
 Rural area	






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Legend	Description
 Light Industrial	
 Business area	Commercial land, B zones
Heritage	
 State heritage	Listed on the State Heritage Register. Can apply to a place, building, work, relic, moveable object, precinct, or land. Any of the following actions require appropriate prior approvals: (a) demolish the building or work, (b) damage or despoil the place, precinct or land, or any part of the place, precinct or land, (c) move, damage or destroy the relic or moveable object, (d) excavate any land for the purpose of exposing or moving the relic, (e) carry out any development in relation to the land on which the building, work or relic is situated, the land that comprises the place, or land within the precinct, (f) alter the building, work, relic or moveable object, (g) display any notice or advertisement on the place, building, work, relic, moveable object or land, or in the precinct, (h) damage or destroy any tree or other vegetation on or remove any tree or other vegetation from the place, precinct or land.
 Item - General	Areas subject to Heritage conservation as designated by the relevant NSW environmental planning instrument (EPI) under the Environmental Planning and Assessment Act 1979, in this case the Goulburn Mulwaree Local Environmental Plan 2009.
Constraints	
 Land use constraints	Includes noise and/or odour emitting uses e.g. sewerage treatment, airport, poultry farm.
 Constraints buffers	Residential land use exclusion area. The size of buffers relates to the type and extent of each specific land use constraint.
 High erosion risk (gradient over 18%)	Unsuitable for clearing and/or residential use.
 Ridge line	Indicative of the topography in Marulan North which functions as a visual buffer to the Hume Highway and


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Legend	Description
	a natural limit to residential development.
 250m from Hume Highway	Buffer to the Hume Highway. No residential access directly to Highway. Dwellings set back to reduce noise impacts and protect rural vista of Highway between towns.
 Buffer to haulage route	Buffer to Brayton Road Haulage Route used by trucks from the Gunlake Quarries. Route built specifically to avoid residential interface through Marulan village. No new residential access to route, future access to opportunity areas from south only. Dwellings to be set back to reduce noise impacts.
 25/26m B-double Routes	Noise and traffic impacts to certain areas for consideration if increasing residential dwellings in the vicinity.
 19m B-double Routes	Noise and traffic impacts to certain areas for consideration if increasing residential dwellings in the vicinity.
 Electricity transmission line	Requires buffers to residential and sensitive uses.
 Gas pipeline	High pressure gas pipeline owned and managed by APA Group. Requires buffers to residential and sensitive uses. A Safety Management Study (SMS) in accordance with AS2885 is triggered by any proposed change in land use classification around the pipelines. The SMS is the responsibility of the proponent/agent of change. APA prefers the land within the buffer be used as a liner park. Limited periodic perpendicular crossings allowed.
Mines and Quarries	
 Potential Resource	Area identified in the 2015 Mineral Resource Audit – Goulburn Mulwaree LGA (Geological Survey of NSW) as containing potential mineral, petroleum and/or extractive resources. Development within these areas could adversely affect or be affected by future resource development operations.
Environment / Vegetation	

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Legend	Description
 TEC	<p>ELA mapped the following three TECs during rapid visual field validation:</p> <ul style="list-style-type: none"> » White Box-Yellow Box-Blakely's Red Gum Grassy Woodland and Derived Native Grassland (Listed under the BCA and EPBC) » Tablelands Snow Gum, Black Sallee, Candlebark and Ribbon Gum Grassy Woodland in the South Eastern Highlands, Sydney Basin, South East Corner and NSW South Western Slopes Bioregions (Listed under the BCA and EPBC) » Natural Temperate Grasslands of the Southern Tablelands of NSW and the ACT (Listed under EPBC)
 Other Vegetation (ELA)	Identified as significant in mapping data but validated on the ground as not TEC
 Validated (ELA)	ELA carried out rapid visual field validation over limited areas of the Goulburn Fringe in July 2019 to identify and update the existing mapped vegetation data with any gross inconsistencies. The validation was carried out from accessible public roads adjoining the areas (shown in Figures 1 and 10 of ELA's report in Appendix E of this Strategy).
 High Environmental Value (OEH)	HEV is an OEH state-wide dataset. Please note this often coincides with Bushfire prone vegetation category 1 on the maps which shows as a light brown colour.
 Strategic agricultural land	DPIE confirmed during the second exhibition of this document that BSAL only impacts on DAs for mining, petroleum and extractive industries.
Bushfire prone land	
 Vegetation Category 1	Vegetation Category 1 is considered to be the highest risk for bush fire. It is represented as red on the bush fire prone land map and will be given a 100m buffer. This vegetation category has the highest combustibility and likelihood of forming fully developed fires including heavy ember production. Vegetation Category 1 consists of: > Areas of forest, woodlands, heaths (tall and short),

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Legend	Description
	<p>forested wetlands and timber plantations.</p> <p>To aid legibility of constraints maps, Categories 2 and 3 are not shown in this Strategy. Consideration of all vegetation categories is required for in-depth site assessments.</p> <p>Please note Vegetation Category 1 often coincides with HEV vegetation and shows as a light brown colour on the Strategy's constraint maps.</p>
Riparian buffers and Flooding	
<p>1st order (10m)</p> <p>2nd order (20m)</p> <p>3rd order (30m)</p> <p>4th order (40m)</p>	<p>Watercourses are ordered according to the Strahler System and assigned a riparian corridor width. The width extends to each side of the watercourse in addition to the channel width. For example, a 3rd order watercourse buffer is 60m plus channel width.</p> <p>In addition to these buffers, an 100m buffer is required between on-site effluent systems and all watercourses within the SDWC. Development must have a NorBE on water quality.</p>
<p> Flooding (1 in 100yr)</p>	<p>This shows Mainstream type flooding for the 1% AEP and is only available for the area covered by the Goulburn Flood Study. Areas not mapped as 1 in 100 year flooding may also experience mainstream and/or overland flooding. The Goulburn Overland Flood Study is currently under preparation.</p>

Precinct 1 Run 'O' Waters (existing)

Locality description

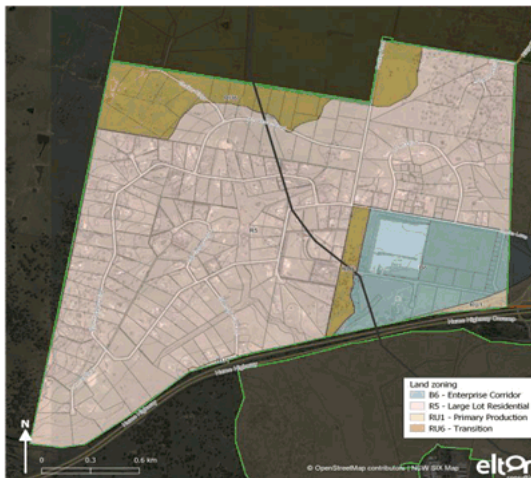
Run 'O' Waters has been included as a specific area due to the more recent development activity and dominance of Large Lot Residential Development. Located to the south west of Goulburn, it has a character typical of an urban transition area.

Lots are large, serviced with water, but not sewer.

The typical lot is between 1-2ha. Large houses are set back on larger lots. The typical density of the area is one dwelling per 1.78ha. While some properties include large sheds, there is little evidence of any other land use other than residential development.

The inefficient use of land is further compounded by the potential impact on surrounding areas of significant biodiversity.

This form of development, while providing diversity, does not make a significant contribution to the housing supply. The Constraints and Opportunities are illustrated on the Precinct Map which combines Precincts 1 and 2.



Character & Planning Controls

Key residential & tourist typologies	Rural residential The Ducks Lane/ Lillkar Road B6 Enterprise Corridor area has vacant land and the Coles Goulburn Regional distribution Centre.
Land use zoning	R5 Large Lot Residential B6 Enterprise Corridor RU6 Transition
Minimum lot size	2000sqm and 2Ha (R5) E4 2000sqm and 2Ha
Heritage	Aboriginal sites have been recorded within the northwest and southeast corners and along the eastern boundary of this precinct.

Housing Gaps

Current development trends likely to continue to deliver single housing typology for the precinct (single dwelling houses on large lots).

Lack of infrastructure (roads, utilities connections) and nearby services (shops, schools, community facilities) may prevent the precinct from delivering affordable or higher density residential development.

Lane Use Opportunities and Constraints

Land has been fragmented by large lot residential subdivision. There are no parks (due to the large lot size) or other infrastructure in this precinct.

The one business in the Run 'O' Waters precinct Business zone, Coles DC is set to close within five years (announced late 2018). The closure and lack of other development in the precinct provides an opportunity for redevelopment.

The area is impacted by the buffer for the Abattoir south of the Hume Highway so would be unsuitable for residential use.

Road access - the precinct is not well connected to the rest of Goulburn.

An opportunity to link the existing area with the Run 'O' Waters (rural north fringe) precinct to provide services and links to Goulburn via Gurrundah road exists.

Analysis of Evidence Base

Run 'O' Waters (existing) has some additional residential capacity under the current LEP provisions – some existing lots are not yet developed. A comprehensive Aboriginal cultural heritage assessment will be required for these areas.

Ongoing viability of residential development in this precinct is restricted by the minimum lot size and lack of existing serviced lots.

Demographics – this precinct (SA1: 10105153901 & SA1: 10105153916) is one of the most relatively advantaged areas in Goulburn with a SEIFA scores of 1072 & 1047.

Recommendations

- Given the availability and capacity of reticulated water and the potential for sewer (subject to pumping stations and line upgrades) the RU6 Transition zone in the northern section of the precinct provides a key opportunity for R2 Low Density Residential Development with a minimum lot size of 700 sqm in the short term to medium term.
- An Urban Release Area provision in the LEP will assist in the staging of development through a DCP and Concept Plan
- Priority - High (refer also Precinct 2)

Precinct 2 Run 'O' Waters (rural north)

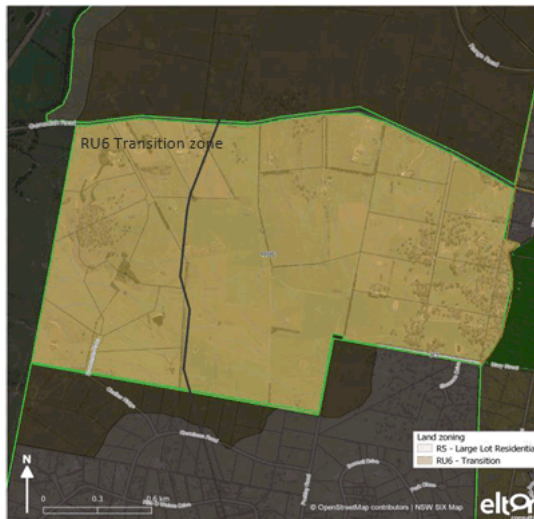
Locality description

This precinct is a rural transition area located immediately north of Run 'O' Waters (existing). Road access is from Gurrundah Road and there is no physical road connection south into the existing Run 'O' Waters precinct. Some potential for connection to Pockley Road and Mary Street is also possible.

Lots within this precinct are typically 10 hectares, which is currently the minimum lot size. There is one larger holding in the centre of precinct, with an area of approximately 100 hectares. Dwellings are typically serviced by on-site independent water and sewer infrastructure.

This precinct is undulating with steep slopes and a 3rd order waterway in the west and a 2nd order waterway in the north east.

The Constraints and Opportunities are illustrated on the Precinct Map which combines Precincts 1 and 2.



Character & Planning Controls

Key residential typologies	Detached dwellings on larger single lots.
Land use zoning	RU6 Rural Transition
Permitted residential typologies	Backpackers' accommodation, Bed and Breakfast Accommodation, Dwelling houses
Minimum lot size	10 hectare (western portion) 2 hectare (eastern portion)
Heritage	"Cole Park" Homestead 115 Gurrundah Road listed in GMLEP 2009. Aboriginal sites recorded within the southwestern area and just outside the eastern precinct boundary.

Housing Gaps

Current development trends likely to continue to deliver single housing typology for the precinct (single dwelling houses on large lots).

Lack of infrastructure (roads, utilities connections) and proximity to nearby services (shops, schools, community facilities) may prevent the precinct from delivering affordable or higher density residential development.

Recommendations

- Rezone to R2 Low Density Residential Development with a minimum lot size of 700 sqm in the short term as per opportunities map.
- An Urban Release Area provision in the LEP would assist in the staging of development through a DCP or Concept Plan.
- Rezone the land that is more constrained by topography and fragmentation to a Large Lot Residential zone. The majority of the 50.5 ha already enjoys a 2 ha MLS and could yield an additional 11 lots as per existing provisions. If services became available the minimum lot size could be reduced to 2000-4000 sqm to provide a transition between the smaller and larger lots and retain the character of the transition from rural to urban on the entrance to Goulburn from the west.
- Priority - high

Land Use Opportunities and Constraints

Not currently serviced by water and sewer infrastructure, however:

- Water is available with limited constraints for proximity to connections, water pressure and capacity.
- Sewer is available with likely requirement for a localised pumping station (subject to network modelling).
- Upstream from Rossi Weir raw water supply requires appropriate stormwater management and discharge – moderate constraints.

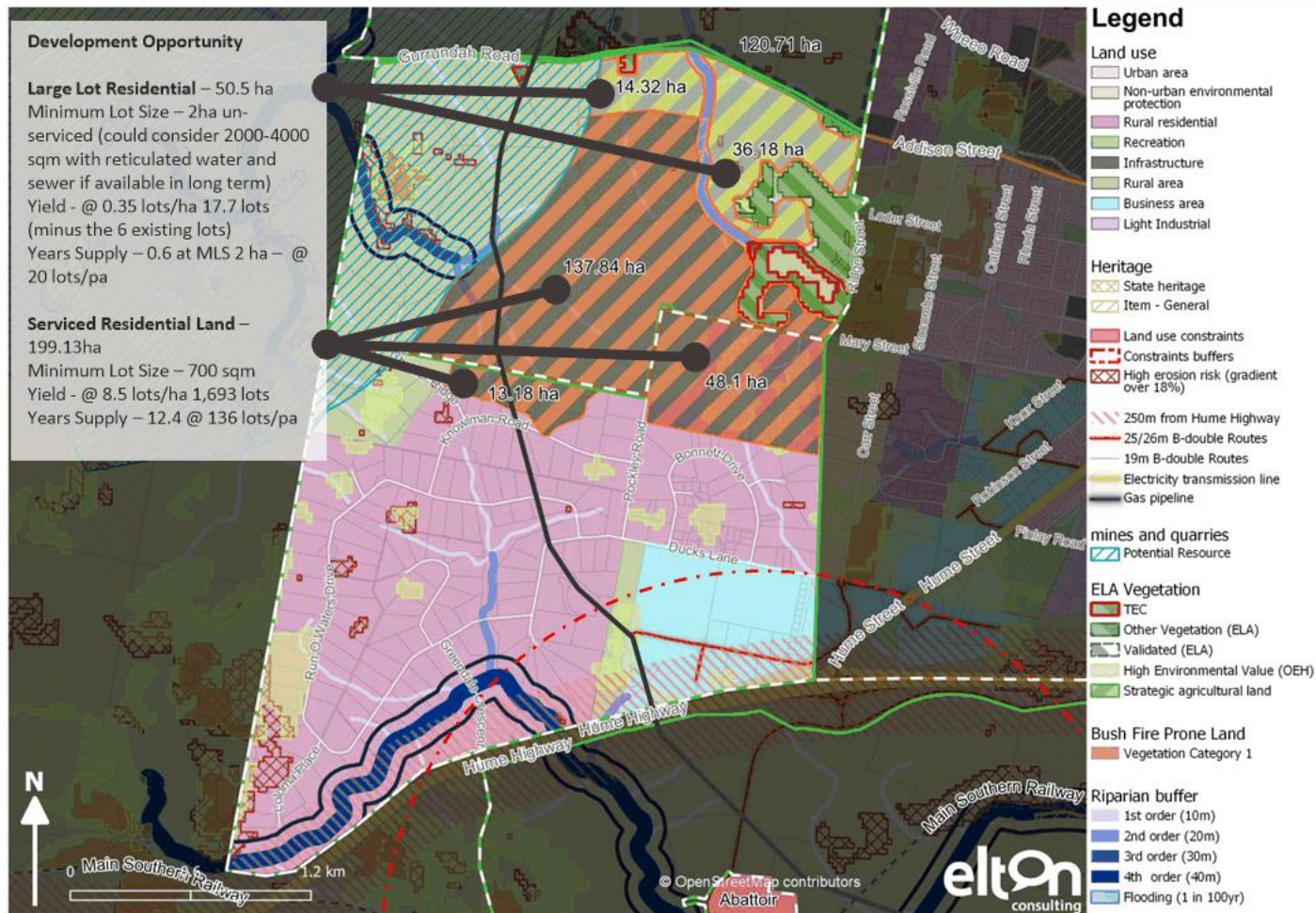
Environmental Constraints

- Eastern portion of precinct around Ridge Street is heavily vegetated and includes an endangered ecological community (Tableland Grassy Box-Gum Woodland). Detailed ecological studies are required for all proposed development areas.
- Development potential of the precinct could be improved with a road connection between Run-O-Waters (existing) and Gurrundah Road.
- On-site sewer systems must be at least 100m clear of a watercourse.

Analysis of Evidence Base

- The precinct appears generally unconstrained, however, a comprehensive Aboriginal cultural heritage assessment is required to confirm suitability of future residential use and management.
- Given the availability of reticulated services, Council should take the opportunity to seek maximum residential yields.
- The existing development in this precinct and the Run 'O' Waters (south) precinct is not supported by open space or social or community infrastructure.
- Run 'O' Waters (rural north) has residential capacity, as demonstrated by a recent planning proposal with a 92 lot community title subdivision, with utilities connections. This density should be reconsidered to deliver more smaller lots to increase the efficiency of the infrastructure and better utilisation of land resources.

1/2 - Run 'o' Waters constraints and opportunities



Precinct 3 Baw Baw

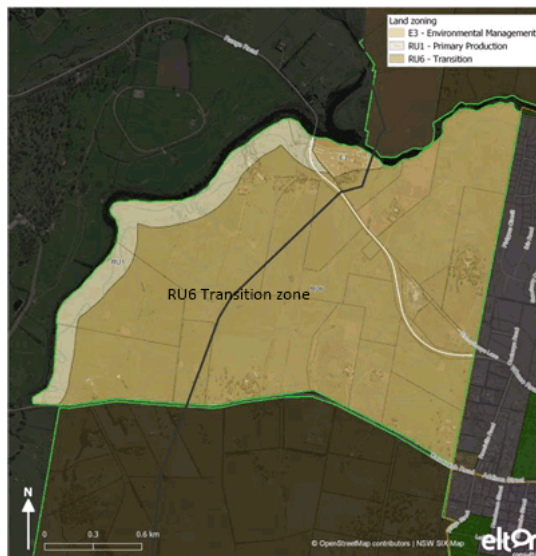
Locality description

Baw Baw is an urban transition area on Goulburn's western fringe, located between Gurrundah Road and Wollondilly River.

The western portion of the precinct is consistent with the rural transition character of Goulburn's fringe. Single dwelling houses are located on large lots of approximately 10 hectares.

The land is undulating to steep with slope greater than 18% illustrated on the precinct map.

The Constraints and Opportunities are illustrated on the Precinct Map.



Character & Planning Controls

Key residential typologies	Detached dwellings on larger single lots.
Land use zoning	RU6 Transition
Permitted residential typologies	Backpackers' accommodation, Bed and Breakfast Accommodation, Dwelling houses
Minimum lot size	20 hectares (western portion) 10 hectares (eastern portion)
Heritage	Road Reserve Range Road (Rossi Bridge) and Lot 51 DP857094 (Bishophorpe Manor) are listed in GMLEP2009. One recorded Aboriginal site within the northeast area of precinct. Potential for objects to occur along and close to Wollondilly River.

Housing Gaps

Current development trends likely to continue to deliver single housing typology for the precinct (single dwelling houses on large lots).

Lack of infrastructure (roads, utilities connections) and proximity to nearby services (shops, schools, community facilities) prevent the precinct from delivering affordable or higher density residential development.

Land Use Opportunities and Constraints

Not currently serviced by water and sewer infrastructure.

- Water available with limited constraints for proximity to connections, water pressure and capacity.
- Sewer is available with likely requirement for a localised pumping station and some enlargement of downstream collection network may be necessary (subject to network modelling).
- Upstream from Rossi Weir raw water supply, requires appropriate stormwater management and discharge.

Environmental Constraints

- A second order stream bisects the precinct, running north-south connecting to Wollondilly River. A 20m exclusion buffer applies to this area.
- Flooding.
- Riparian corridors are also considered to be High Environmental Value Areas.
- The precinct is also constrained by slope and the identification of potential mineral resources.

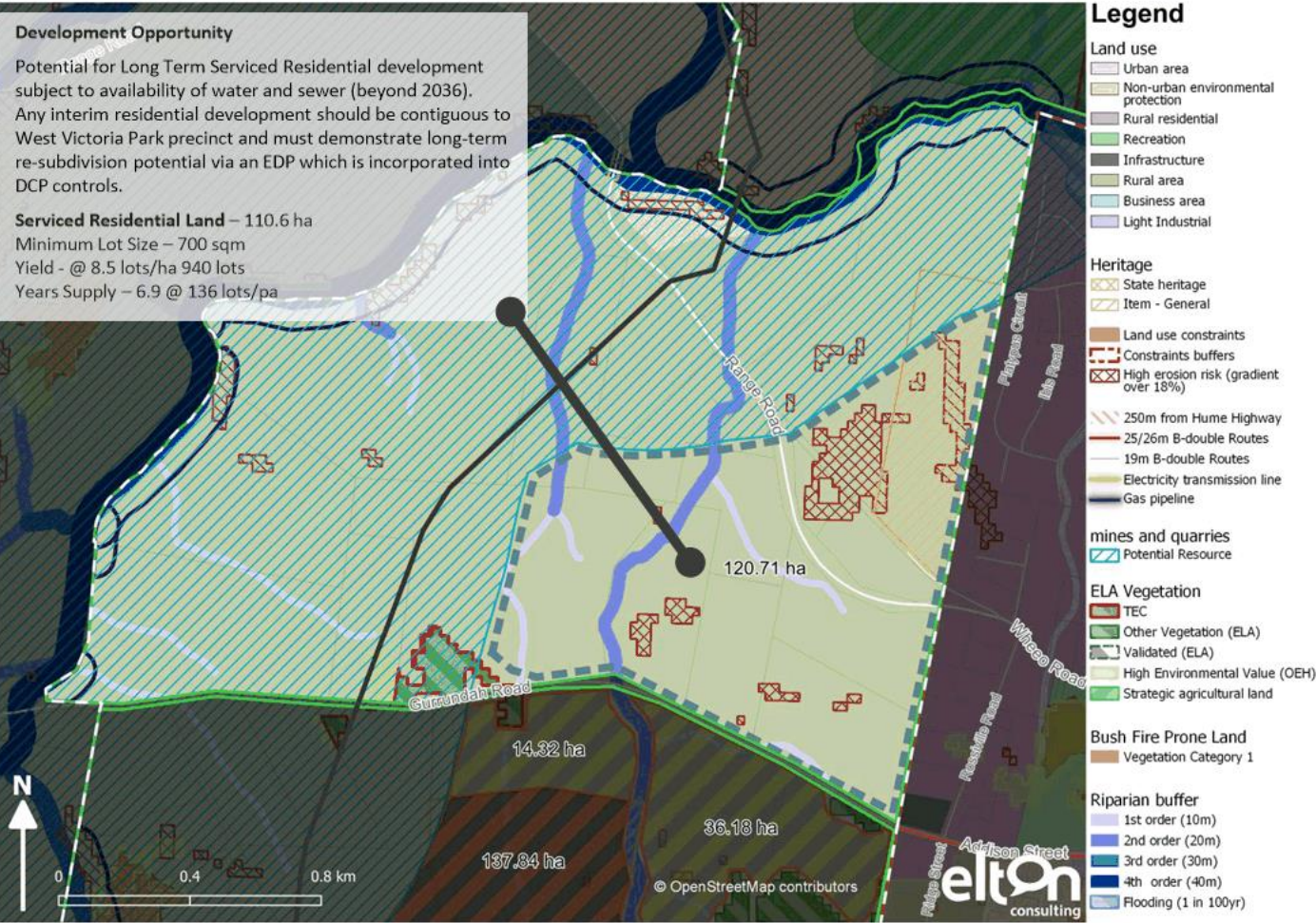
Analysis of Evidence

- The precinct is well supported with water infrastructure and provides for a future opportunity for serviced residential land.
- Large Lot residential is not supported given the long term capacity of the precinct beyond 2036.
- There are other precincts that are better placed for consideration of urban development up until 2036. Until such time that the potential has run out of other areas, the minimum allotment size within this precinct should be maintained at no less than 10ha so as to preserve its potential beyond the timeframe of this Strategy.
- Any future plans for development will require a comprehensive Aboriginal cultural heritage assessment.

Recommendations

- The precinct should be protected from further fragmentation from large lot residential development in the long term.
- No change is proposed for this precinct; consideration of urban expansion into this precinct to occur following the exhaustion of more suitable areas for urban development.

3 - Baw Baw constraints and opportunities



Precinct 4 Sooley

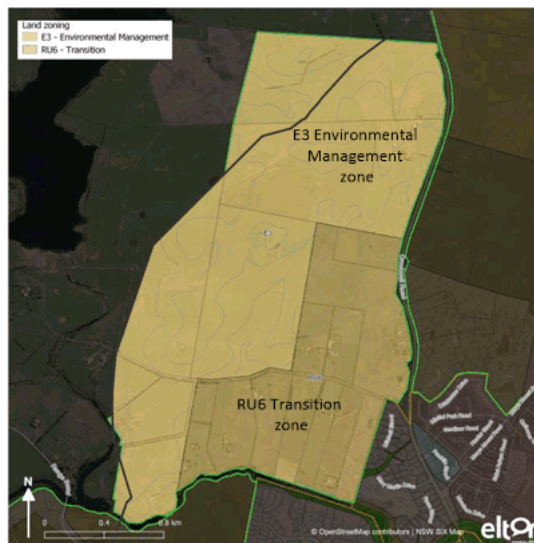
Locality description

The Sooley precinct is a rural precinct on the Goulburn's northwest fringe, bounded by Crookwell Road and the Wollondilly River.

Lots to the south are smaller and reflect the rural transition zoning of the majority of Goulburn's fringe. Landholdings comprise single lots and are typically between 12-20 hectares.

Lots to the north have a typical rural character and are typically larger lots than the southern portion. These lots range in size from 10 to over 100 hectares and landholdings often include multiple lots.

The Constraints and Opportunities are illustrated on the Precinct Map.



Character & Planning Controls

Key residential typologies	Detached dwellings on large single lots (rural or transition)
Land use zoning	RU6 Transition E3 Environmental Management
Permitted residential typologies	Dwelling houses, Rural worker's dwellings, Secondary dwellings, Tourist and visitor accommodation
Minimum lot size	100 hectares (E3) 10 hectares (RU6)
Heritage	No recorded Aboriginal sites to date. Potential for Aboriginal objects to occur along and close to Wollondilly River.

Housing Supply Gaps

This is an agricultural precinct and does not currently contribute to the broader housing supply in the LGA

Recommendations

- Retain as RU6 Transition in the short term to prevent fragmentation.
- Any future plans for development will require a comprehensive Aboriginal cultural heritage assessment.
- Long term R2 Low Density Residential in the south eastern area of the precinct.

Land Use Opportunities and Constraints

Not currently serviced by water and sewer infrastructure:

- Water available with limited constraints for proximity to connections, water pressure and capacity in the southern portion.
- Water pressure is a constraint towards the northern portion of the precinct (high elevation and remote to service). A designated service reservoir and delivery main would be required to service this area (including Narrangarril West).
- Sewer is available across the whole precinct with a requirement for a localised pumping station (subject to network modelling).

Environmental Constraints

- The southeast corner of the precinct, immediately west of the existing urban footprint, contains an endangered ecological community (Natural temperate grassland)
- APA gas pipeline bisects the precinct in an east-west direction approximately 1km north of Chinaman's Road.
- An area of biophysical strategic agricultural land (BSAL) is identified within this precinct.
- Potential resource constraint will work alongside the BSAL triggered by the *Mining, Petroleum Production and Extractive Industries SEPP*.
- Flooding in vicinity of water courses.
- Water quality of Sooley Dam must be protected.

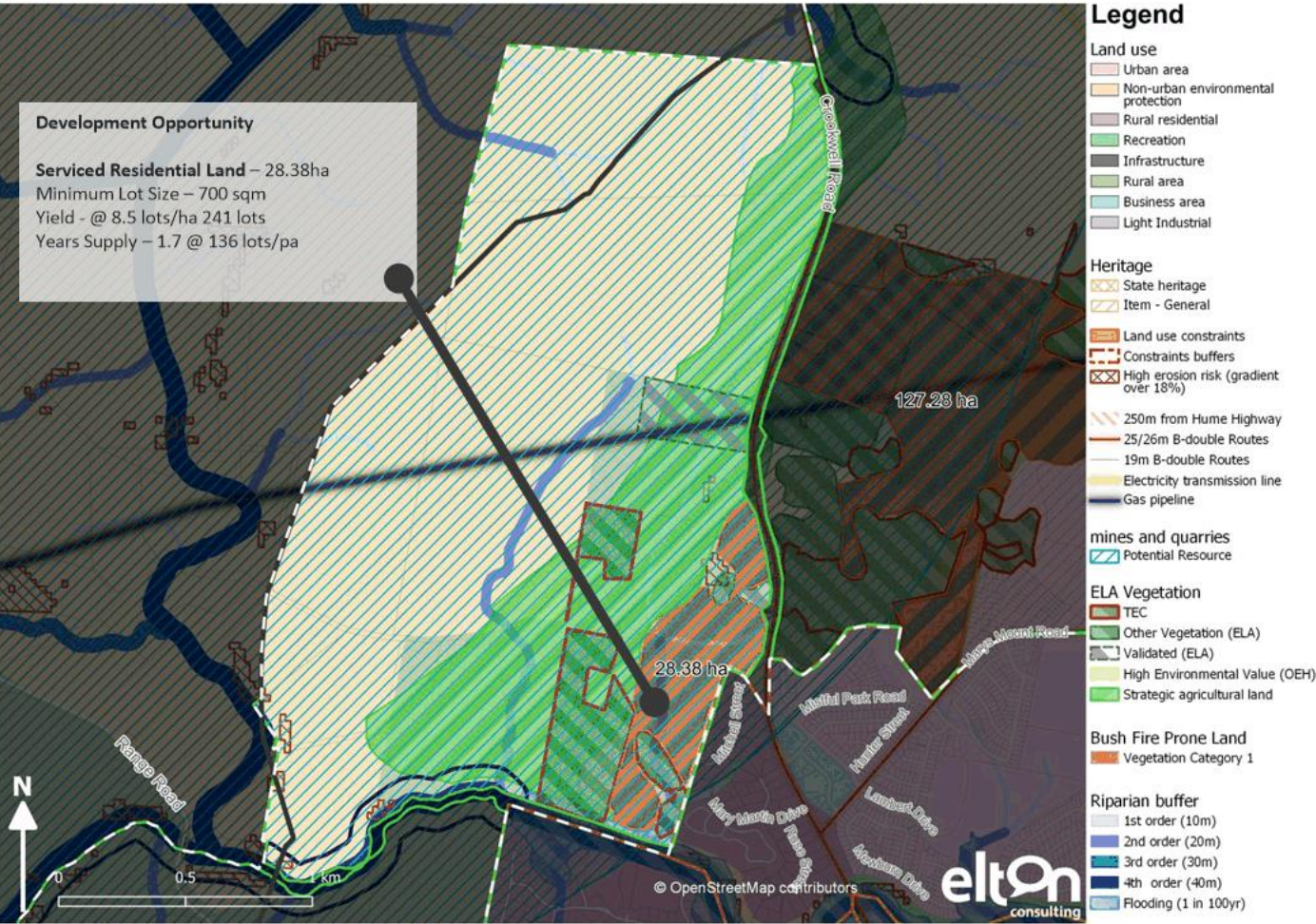
Analysis of Evidence

Several landowners within the precinct have indicated to Council their desire to subdivide into large lot residential lots.

Large Lot residential is not supported given the identification of the area as strategic agricultural land. There may an opportunity to re-develop the already fragmented 10ha lots closest to Crookwell Road and adjoin the existing urban area. However this would be for fully serviced residential lots with a 700 sqm MLS and yield 241 lots or 1.7 years supply.

For the balance of the precinct, at present there are other precincts that are better placed for consideration of urban development up until 2036. Until such time that the potential has run out of other areas, the minimum allotment size within this precinct should be maintained at no less than 10ha for the RU6 Transition zone and 100ha for the E3 Environmental Management zone so as to preserve its potential beyond the timeframe of this Strategy.

4 - Sooley constraints and opportunities



Precinct 5 Middle Arm West

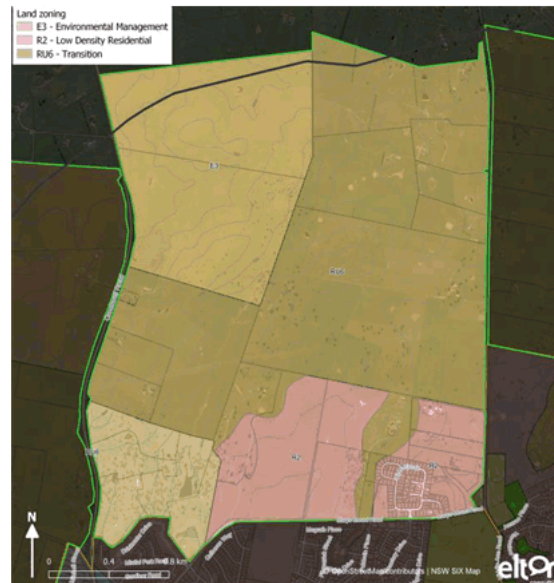
Locality description

Middle Arm West is a rural fringe precinct immediately north of Marys Mount. The majority of the land within it is zoned RU6 Transition. The land use is typically large rural landholdings with a single dwelling.

The land has largely been cleared for grazing and agricultural purposes.

The southern strip of land adjoining Marys Mount represents the current northern extent of greenfield development on Goulburn. It includes suburban residential subdivisions.

The Constraints and Opportunities are illustrated on the Precinct Map which combines Precincts 5 and 6.



Character & Planning Controls

Key residential typologies	Detached dwellings on large rural lots
Land use zoning	E3 Environmental Management RU6 Rural Transition R2 Low Density Residential
Permitted residential typologies	Backpackers' accommodation, Bed and breakfast accommodation, Boarding houses, Dwelling houses, group homes
Minimum lot size	100 hectares (E3) 20 hectares (RU6) 700m ² (R2)
Heritage	133 Marys Mount Rd (dwelling "Teneriffe") listed in GMLEP 2009. Aboriginal sites recorded within the south of precinct and as part of previous surveys for existing subdivisions to the south.

Housing Gaps

The majority of development that has occurred over the past decade has been in the north of Goulburn around Marys Mount without any development masterplan to guide development. Development within the urban release area has potential to provide for affordable housing due to lower minimum lot size.

Consideration of adequate open space and social infrastructure planning could be achieved by master planning the entire northern release area (Structure Plan/DCP). This would also assist in calculating water and sewerage servicing requirements.

Existing urban release land (R2 zoned) should be explored for diversity of dwelling typology. Clause 4.1A of the GMLEP 2009 permits subdivision below the minimum lot size for this zone.

Land Use Opportunities and Constraints

Not currently serviced by water and sewer infrastructure:

- Water infrastructure is available with areas constrained due to water pressure.
- A designated service reservoir and delivery main would be required to service this precinct.
- Sewer is available with likely requirement for a localised pumping station and some enlargement of downstream collection network is likely to be necessary (subject to network modelling).
- The area is constrained by the gas pipeline which significantly impacts development immediately adjacent.
- A high voltage transmission line also runs north south through the area.

Environmental Constraints

- The precinct contains an endangered ecological community (Yellow Box - Red Gum Woodland).
- The potential resource constraint also impacts the precinct as does the Strategic Agricultural Land.
- Watercourses are identified as constraints that need consideration in any master plan for the area.

Analysis of Evidence

- According to Council data, approximately 150 single dwelling lots have been delivered within the urban release area to date.
- Given the constraints, and existing development activity, there is an opportunity to continue to deliver housing in this area in the short term.

Recommendations

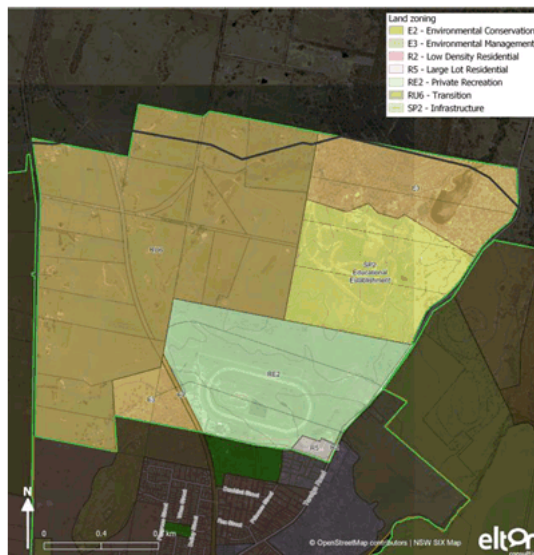
- Rezone land immediately adjoining the existing urban fringe in the short/medium term to urban residential.
- Long term development opportunity subject to a detailed masterplan and comprehensive Aboriginal cultural heritage assessment.
- Include Urban Release Area Provisions
- Priority – Medium/High

Precinct 6 Middle Arm East

Locality description

The Middle Arm East precinct is the area bounded by Middle Arm Road and Taralga Road, generally surrounding the Goulburn Racecourse. It is located immediately north of the existing urban area of Bradfordville,

The precinct is largely RU6 transition land with large lots and single dwelling houses. The eastern portion is dominated by the Goulburn Racecourse and NSW Police driver training course, and includes a small residential enclave of lifestyle lots with single dwellings.



Character & Planning Controls

Key residential typologies	Detached dwellings on single lots
Land use zoning	E3 Environmental Management RU6 Rural Transition RE1 Public Recreation RE2 Restricted Recreation R5 Large Lot Residential
Permitted residential typologies	Backpackers' accommodation, Bed and breakfast accommodation, Boarding houses, Dwelling houses, group homes
Minimum lot size	100 hectares (E3) 20 hectares (RU6) 2,000 m2 (R5)
Heritage	Aboriginal sites have been recorded in this precinct.

Housing Gaps

The majority of development that has occurred over the past decade has been in the north of Goulburn around Marys Mount without any development masterplan or site specific DCP to guide development. Development within the urban release area has potential to provide for affordable housing due to lower minimum lot size.

Consideration of adequate open space and social infrastructure planning could be achieved by master planning the entire northern release area (Structure Plan/DCP). This would also assist in calculating water and sewerage servicing requirements.

Existing urban release land (R2 zoned) should be explored for diversity of dwelling typology. Clause 4.1A of the GMLEP 2009 permits subdivision below the minimum lot size for this zone.

Land Use Opportunities and Constraints

Not currently serviced by water and sewer infrastructure, investigation by Council engineers regarding serviceability constraints of this precinct is required. Under the current infrastructure and water can only be delivered to the 690m contour and still maintain pressure.

Likely to be serviceable with a designated water service reservoir and delivery main, and localised sewer pumping station.

Environmental Constraints

- The north east corner of the precinct contains an endangered ecological community (Yellow Box - Red Gum Woodland).
- Kenmore Creek passes through the precinct and requires a riparian buffer.
- APA Group's high pressure gas pipeline bisects the precinct in an east-west direction immediately north of the racecourse and requires a hazard buffer.
- Goulburn Racecourse occupies the south eastern portion of the precinct.
- NSW Police Driver Training facility occupies the north eastern portion of the precinct with associated noise impacts.

Analysis of Evidence

Recreational precinct opportunity with existing uses and potential to utilise former Goulburn to Crookwell railway as a rail trail.

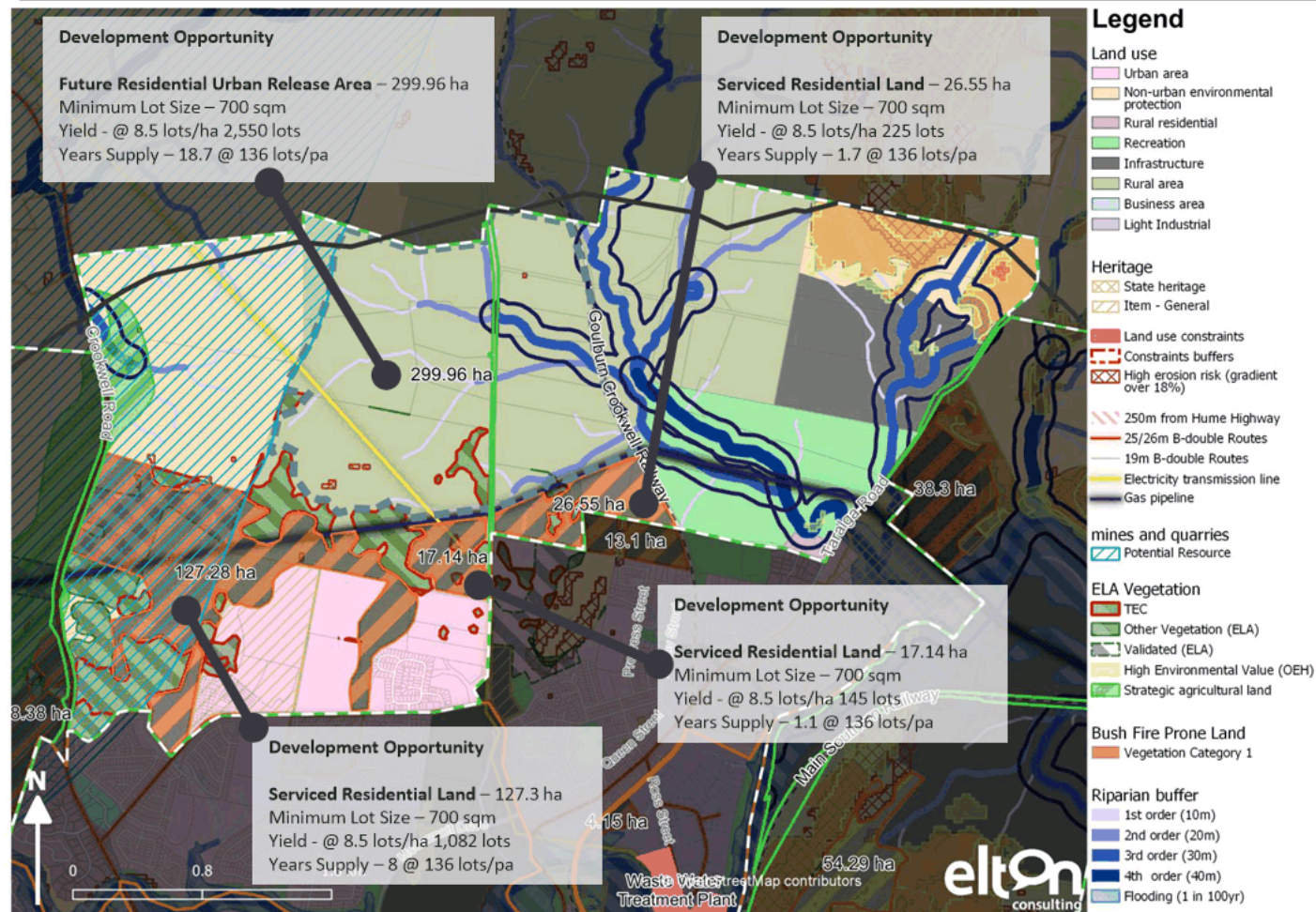
There may be potential for serviced (water and sewer) equine animal boarding and training establishments within the current RE2 zone. Appropriate lot size would be determined through a Planning Proposal process.

Residential opportunity in the long term for land west of the railway and north of the gas pipeline, recommend protection from fragmentation.

Recommendations

- Rezone land immediately adjoining the existing urban fringe and south of the gas pipeline in the short to medium term to urban residential, relating to the rezoning of land in Bradfordville (refer Precinct 16)
- Long term development opportunity north of pipeline and west of railway subject to a detailed masterplan and comprehensive Aboriginal cultural heritage assessment.
- Include Urban Release Area Provisions
- Priority – Medium/High

5/6 - Middle Arm constraints and opportunities



Precinct 7 Kenmore

Locality description

The Kenmore precinct is the area bounded by Taralga Road and the railway line, spanning the Wollondilly River, excluding the historic Kenmore Hospital Complex.

Kenmore precinct contains a significant area of irrigation land area associated with the old Goulburn sewerage treatment plant (STP). This land use is redundant now that the new STP is operational. The precinct also contains significant amounts of environmental conservation, area subject to biodiversity offsets and environmental management land.



Character & Planning Controls

Key residential typologies	Detached dwellings on single lots A small number of rural-residential lots
Land use zoning	E2 Environmental Conservation E3 Environmental Management SP2 Infrastructure
Permitted residential typologies	Backpackers' accommodation, Bed and breakfast accommodation
Minimum lot size	100 hectares
Heritage	Kenmore Hospital Cemetery (c 1895–1947) Lot 2, DP 1003261 Taralga Road, listed in GMLEP 2009. Aboriginal sites recorded as part of the Goulburn STP survey in 2003. Potential for Aboriginal objects to occur along and close to the Wollondilly River.

Housing Gaps

Typically there is a lack of diversity of housing in the residential precincts immediately west.

Land Use Opportunities and Constraints

Not currently serviced by water and sewer infrastructure:

- Water infrastructure is available with limited constraints for proximity to connection, water pressure and capacity.
- Sewer is available with a likely requirement for a localised pumping station.

Environmental Constraints

- Land within the sewerage treatment irrigation area south of the Wollondilly River is subject to flooding
- Land in the north of the precinct is fairly steep and predominantly cleared of trees. Erosion along minor waterways is evident in aerial imagery
- The northeast corner of the precinct is steep terrain which is significantly vegetated and contains bushfire prone land (Vegetation Categories 1-3)
- Noise from the nearby NSW Police Driver Training Facility would also need to be considered prior to rezoning any of this precinct to residential.
- The Gas pipeline requires a buffer to residential and sensitive land uses.

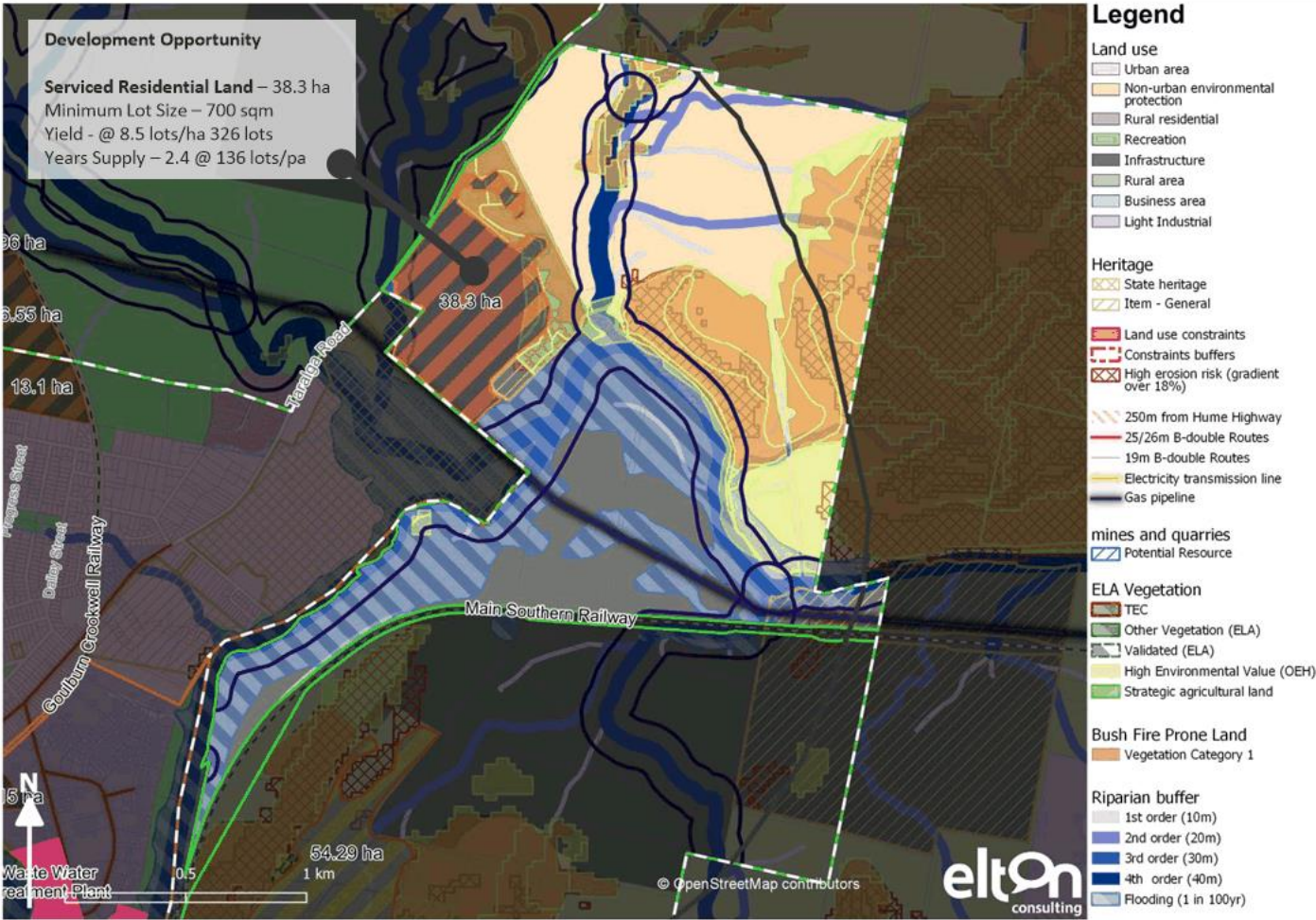
Analysis of Evidence

- A significant portion of land in the precinct is highly vegetated. Council has not been approached by landowners within this precinct raising interest in pursuing rural residential subdivision.
- Pending a contamination assessment, the sewerage treatment irrigation area north of the Wollondilly River may be suitable for urban residential use, accessed via Taralga Road.
- The existing environmental zoning and environmental constraints mean the precinct has limited capacity to provide residential development with significant density, aside from the area off Taralga Rd currently zoned SP2, between the flood prone area and Environmental zoned areas. This SP2 area is also well supported with existing water and sewerage infrastructure (minor constraints).

Recommendations

- Rezone land immediately adjoining the existing urban fringe in the short to medium term to urban residential.
- Include Urban Release Area (URA) Provisions.
- Comprehensive Aboriginal cultural heritage assessment required.
- Priority – Medium/High

7 - Kenmore constraints and opportunities



Precinct 8 Gorman Road

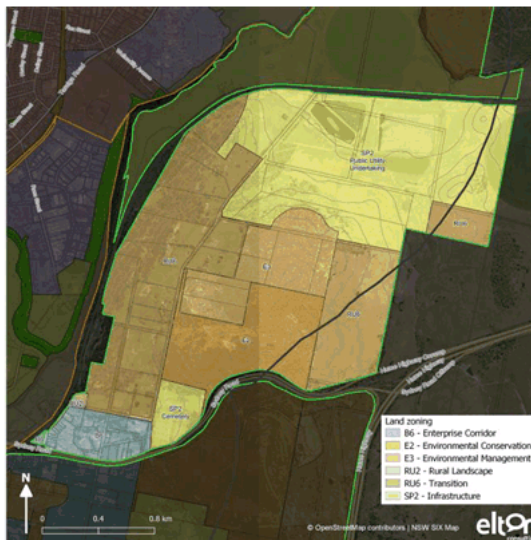
Locality description

The hilly area is bounded by the Wollondilly River, Main Southern Railway line and Sydney Road. It is predominantly a rural transition area with a very low dwelling density. The majority of dwellings are centred on Gorman Road.

The north of the precinct is dedicated to the former Goulburn sewerage treatment plant, with ponds and an irrigation area. Although this land use is now redundant, ducks (including endangered Blue-billed and Freckled duck, Pink-eared duck, Pacific Black duck and Hardhead ducks) have been observed on the old sewerage ponds. This may prevent removal of the ponds and present an opportunity for conservation as a wildlife reserve.

The former irrigation and sewerage ponds area would require a contamination assessment prior to any redevelopment.

There is potential for Aboriginal objects to occur along and close to Wollondilly River and requires a comprehensive ACH assessment.



Character & Planning Controls

Key residential typologies	Detached dwellings on single lots A small number of rural-residential lots
Land use zoning	E2 Environmental Conservation E3 Environmental Management RU6 Rural Transition B5 Enterprise Corridor
Permitted residential typologies	Backpackers' accommodation, Bed and breakfast accommodation
Minimum lot size	100 hectares (western portion) 2ha hectares (eastern portion)
Heritage	Listed in GMLEP 2009: - Brick Works, Chimneys, Kilns, Dwelling, "The Potteries" (c 1985) - Lot 12, DP 861360; Lot 2, DP 740958 - Goulburn General Cemetery, Lot 7017, DP 94629 - House, Fruit Packing Shed (former, c 1900) Lot 12, DP 1044967 - Veterans Allotments, Lot 102, DP 791867. Aboriginal sites recorded along southern boundary and as part of Goulburn STP survey in 2003 in the north east.

Housing Gaps

The existing environmental zoning and environmental constraints mean the precinct has limited capacity to provide residential development with significant density, meaning insufficient lots to support the necessary sewer and water infrastructure.

There is potential for limited rural-residential-served development through the RU6 zoned area in the west, however the overall intent of Council is to maintain the rural transition character of the precinct.

Land Use Opportunities and Constraints

The precinct is not currently serviced by water and sewer.

In the north of the precinct:

- Water infrastructure is available with limited constraints for proximity to connection, water pressure and capacity.
- Sewer is available with a likely requirement for a localised pumping station.

In the western area of the precinct:

- Water is available with areas constrained due to water pressure. A designated service reservoir and delivery main would be required to service this area.
- Sewer is available with likely requirement for a localised pumping station.

Environmental Constraints

- The centre of the precinct is highly vegetated and is identified as bushfire prone land.
- The centre of the precinct is also steep terrain (gradient over 18%) which is considered high erosion risk, particularly if vegetation is removed.
- An area of vegetation north of the Cemetery was validated by EcoLogical Australia in July 2019 as Scribbly Gum/ Red Stringybark Woodland (dry sclerophyll forest). EcoLogical observed that the remainder of the surrounding vegetation was "likely exotic, farming and housing".
- The southern portion of the precinct in proximity to Sydney Road has been zoned B6 Enterprise Corridor as recommended in the Employment Land Strategy.
- Goulburn General Cemetery is an active 11.95ha cemetery located directly north of the Sydney Road on the lower slopes of Governor's Hill.
- Noise from Speedway, Motor Cycle Club, Main Southern Rail Line and Hume Highway.
- On-site effluent management buffers – 100m to any watercourse

Analysis of Evidence

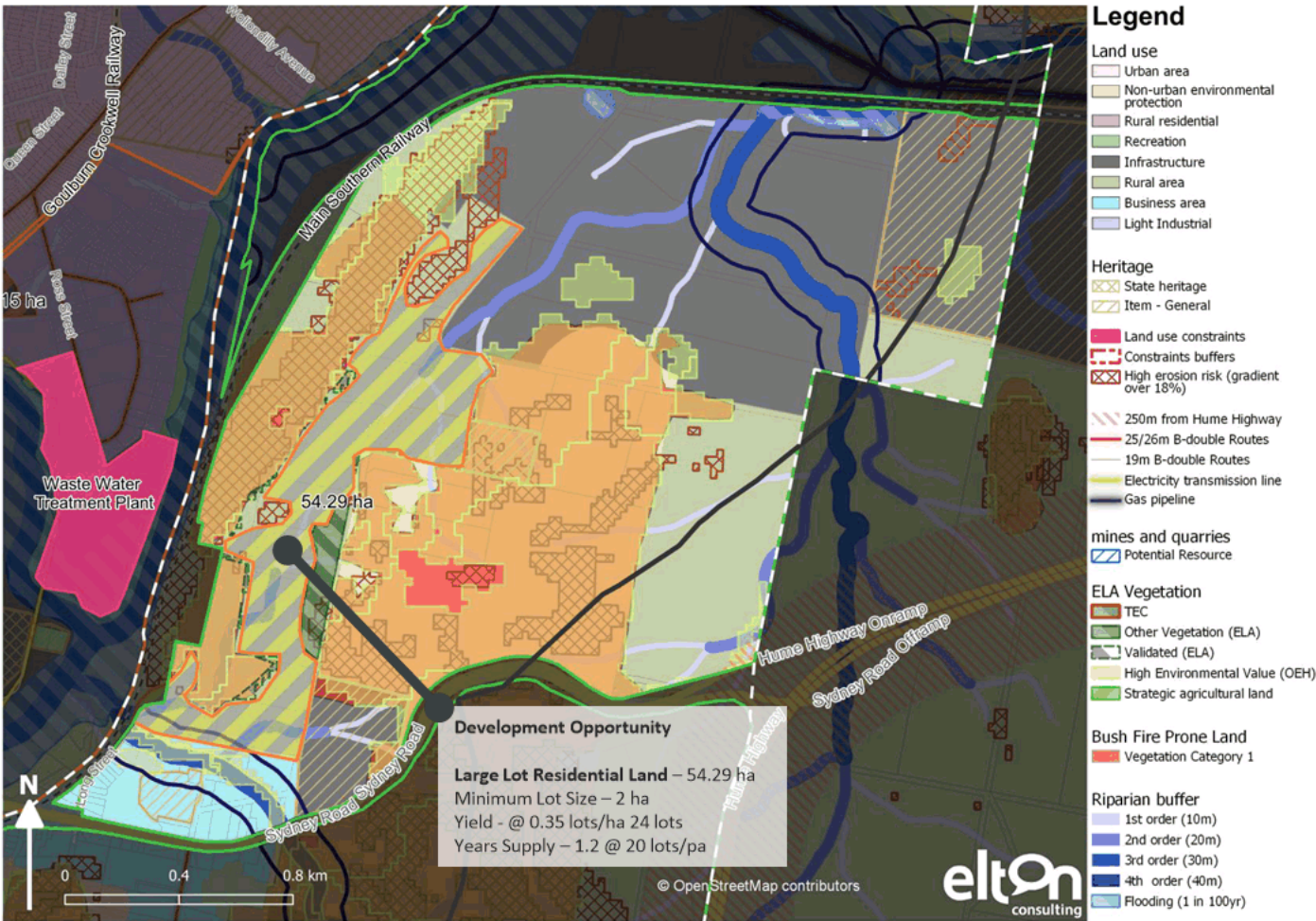
The Mt Gray - Governor's Hill range forms a natural boundary to the eastern extent of Goulburn city therefore the northern SP2 area and eastern RU6 Transition areas of this precinct should not be developed for urban or rural residential.

Part of the land zoned B6 Enterprise Corridor in the south is predominately residential and is being rezoned for that purpose.

Recommendations

- Rezone the RU6 land that is least constrained by topography and environmental constraints to a Large Lot Residential zone (MLS >2ha).
- The former irrigation and sewerage ponds area is surplus to Council requirements. A range of alternative land uses could be investigated pending contamination status and a comprehensive Aboriginal cultural heritage assessment.
- Priority – High

8 - Gorman Rd constraints and opportunities



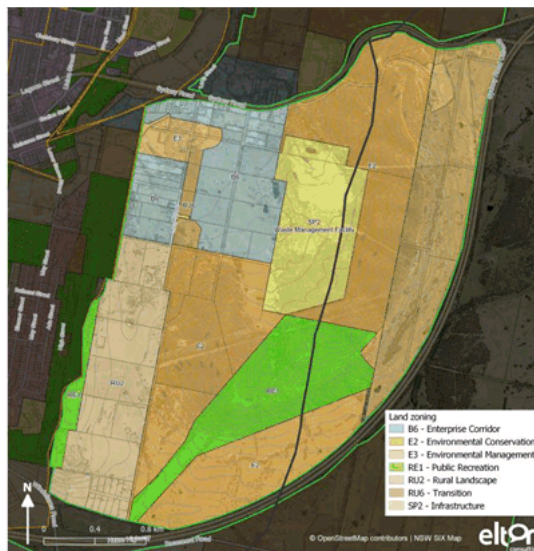
Precinct 9 Mt Gray East

Locality description

The hilly area between the Hume Highway and Sydney Road, east of the ridgeline separating Eastgrove.

The precinct has a diversity of land uses and zoning including infrastructure zones for the Council Waste Management Facility and Landfill, enterprise lands, recreation land for the shooting range, and rural and rural transition lands also containing the Speedway and Motor Cycle Club.

Significant Aboriginal sites exist within the Rocky Hill area.



Character & Planning Controls

Key residential typologies	Detached dwellings on single lots A small number of rural-residential lots
Land use zoning	E2 Environmental Conservation E3 Environmental Management RU6 Rural Transition B5 Enterprise Corridor
Permitted residential typologies	Backpackers' accommodation, Bed and breakfast accommodation
Minimum lot size	100 hectares (western portion) 10 hectares (eastern portion)
Heritage	Jewish Cemetery, Foundations of Caretaker's Cottage, Chapel, Filled Well, Part Lot 24, DP 750050 listed in GMLEP2009. A large number of Aboriginal sites have been recorded within this precinct as part of the Rocky Hill Powerline and previous subdivisions. There is potential for Aboriginal objects to occur closer to the Mulwaree River.

Housing Gaps

The contribution of this precinct to the housing supply is currently limited.

Recommendations

- Rezone the land that is least constrained by topography and environmental constraints to a Large Lot Residential zone (MLS >2ha).
- Amend GMLEP to address anomalies in split zone created by Highway.
- Priority – High

Land Use Opportunities and Constraints

The precinct is not currently serviced by water and sewer infrastructure:

- Water infrastructure is available with limited constraints for proximity to connection, water pressure and capacity subject to network modelling.
- Sewer is available with likely requirement for a localised pumping station subject to network modelling.

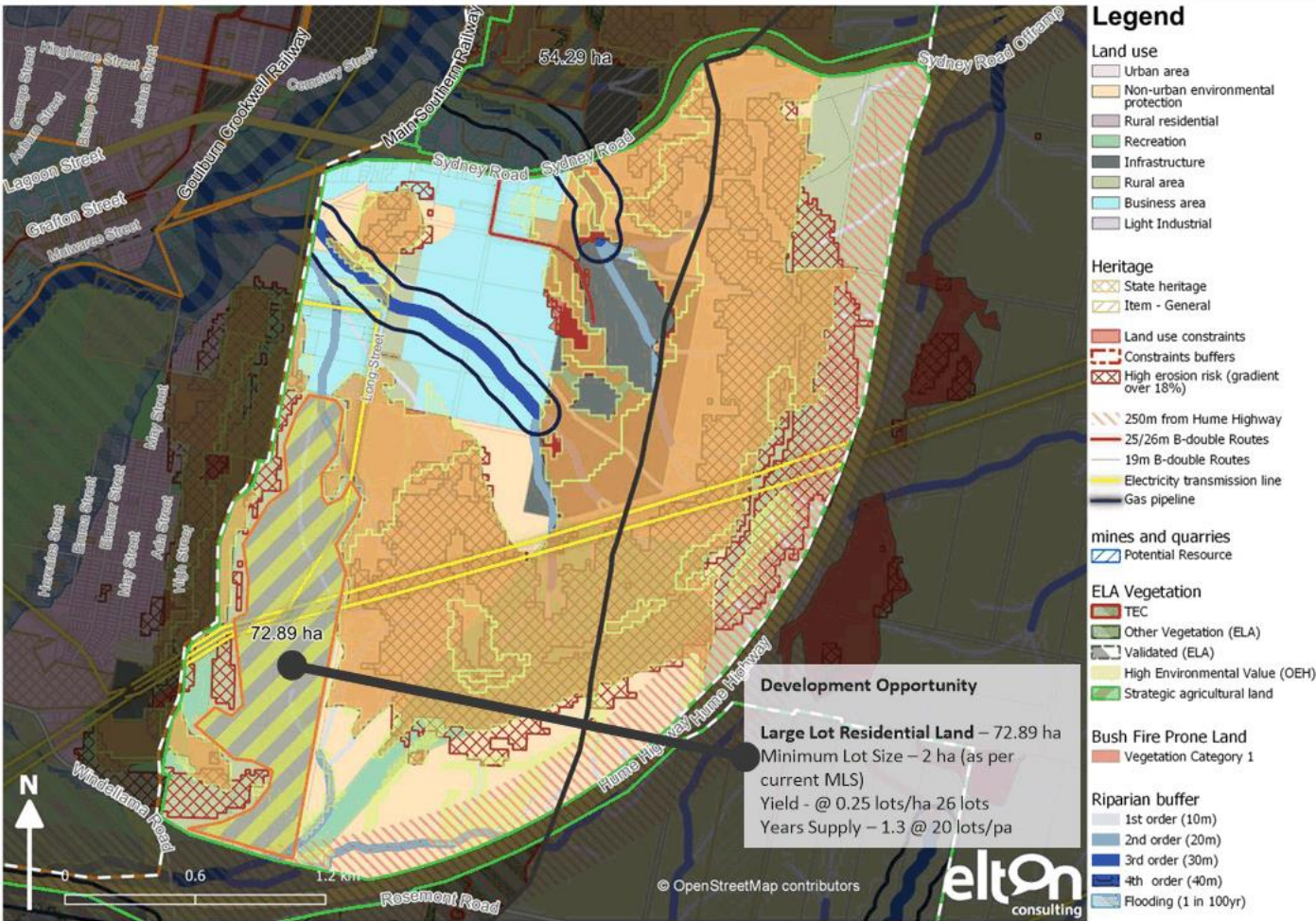
Environmental Constraints

- The majority of the precinct is hilly and therefore slope affected.
- This land is also significantly vegetated and is identified as bushfire prone land.
- The Employment Land Strategy has identified the northern portion of the precinct as a potential B6 Enterprise Corridor based in proximity to Sydney Road.
- Council has received an application for a poultry farm which may limit nearby residential development.
- Noise from Speedway and Motor Cycle Club.
- On-site sewer systems must be at least 100m clear of a watercourse.
- Areas planned for development will require a comprehensive ACH assessment.

Analysis of Evidence

- Opportunity to address zoning anomaly created by Highway between Environmental and RU6 zones between Mt Gray and Mountain Ash precincts.
- The existing environmental zoning and environmental constraints mean the precinct has limited capacity to provide residential development with significant density.
- Opportunity for Large Lot Residential on unconstrained land

9 - Mt Gray East constraints and opportunities



Precinct 10 Mountain Ash

Locality description

A rural and rural transition area south of the Hume Highway, on both sides of Mountain Ash Road.

Residential development is typically rural with landholdings consisting of multiple lots.

Housing Gaps

Lack of infrastructure (roads, utilities connections) and distance to nearby services (shops, schools, community facilities) will prevent the precinct from delivering affordable or higher density residential development.



Character & Planning Controls

Key residential typologies	Detached dwellings on single lots A small number of rural-residential lots
Land use zoning	RU1 Primary Production RU6 Rural Transition
Permitted residential typologies	Backpackers' accommodation, Bed and breakfast accommodation, dwelling house
Minimum lot size	100 hectares (RU1) 10 -20 hectares (RU6)
Heritage	Listed in GMLEP 2009: - Dwelling, "Wyoming", Lot 1, DP 794750 - Dwelling, "Homeden", Lot 67, DP 126140 - Nooga, Lot 98, DP 802308 - "Irrilwilbin" Lot 2, DP 853498 Aboriginal sites have been recorded in the Rosemont Rd area. Potential for Aboriginal objects to occur along and close to the watercourses.

Recommendations

- Rezone the land that is least constrained by topography and environmental constraints to a Large Lot Residential zone.
- Amend GMLEP to address anomalies in split zone created by Highway.
- Priority – High

Land Use Opportunities and Constraints

Mountain Ash precinct is not currently serviced by water and sewer infrastructure:

- Water infrastructure is constrained due to water pressure and proximity to connection and would likely be linked to Brisbane Grove precinct.
- Sewer infrastructure is constrained due to proximity to connection and likely requirement for a localised pumping station, some enlargement of downstream collection network is also likely to be necessary (subject to network modelling).

Environmental Constraints

- The majority of vegetation in the precinct has been removed for agricultural purposes and is therefore significantly disturbed and represents low ecological value. However, rapid validation of precinct TEC by ELA found approximately 14.37ha of Box Gum woodland / Yellow Box – red gum woodland EEC.
- The precinct contains large areas of land identified as being bushfire prone.
- Proximity to Goulburn Airport could limit density of residential development.
- Proximity to Wakefield Park imposes a noise constraint on this precinct.
- Flooding near water courses.
- On-site sewer systems cannot be within 100 m of a water course of any classification in the Sydney Drinking Water Catchment (SDWC) which will limit the density of rural residential dwellings in this precinct. Any development within the SDWC must have a neutral or beneficial effect (NorBE) on water quality.

Analysis of Evidence

Opportunity to address zoning anomaly created by Highway between E and RU6 zones between Mt Gray and Mountain Ash precincts.

On-site sewer cannot be within 100 m of a water course of any classification and development must have a NorBE on water quality.

Areas planned for development will require a comprehensive Aboriginal cultural heritage assessment.

Suited to Large Lot Residential development subject the resolution of noise and other issues.

Opportunities for Precincts 10 and 11 have been considered together.

Precinct 11 Brisbane Grove

Locality description

A rural and rural transition area south of the Hume Highway, west of Mountain Ash Road. Residential development is typically rural with landholdings consisting of multiple lots.

Housing Gaps

Lack of infrastructure (roads, utilities connections) and distance to nearby services (shops, schools, community facilities) will prevent the precinct from delivering affordable or higher density residential development.



Character & Planning Controls

Key residential typologies	Detached dwellings on single lots A small number of rural-residential lots
Land use zoning	RU1 Primary Production RU6 Rural Transition
Permitted residential typologies	Backpackers' accommodation, Bed and breakfast accommodation, dwelling house
Minimum lot size	100 hectares (RU1) 10 -20 hectares (RU6)
Heritage	Listed in GMLEP 2009: <ul style="list-style-type: none"> - I107 - "Garroorigang", Stables 209 Braidwood Rd - I009 - Dwelling, "Alfarthing" 2 Brisbane Grove Rd - I010 - Dwellings, "Brigadoon" and "Wyandra" 54 & 56 Brisbane Grove Rd - I011 - Dwelling, "Sofala" 137 Brisbane Grove Road - I012 - Dwelling, "Weston" 242 Brisbane Grove Rd - I013 - Dwelling, "Corrinyah", Corrinyah Rd - I015 - Homestead, "Yattalunga" (1860), Johnson Lane Potential for Aboriginal objects to occur along and close to the Mulwaree River.

Land Use Opportunities and Constraints

Not currently serviced by water and sewer infrastructure:

- Water infrastructure is available with constraints due to water pressure, proximity to connection and capacity.
- Sewer infrastructure is constrained due to proximity to connection and likely requirement for a localised pumping station, some enlargement of downstream collection network likely to be necessary (subject to network modelling).

Environmental Constraints

- The majority of vegetation in the precinct has been removed for agricultural purposes and is therefore significantly disturbed and represents low ecological value.
- The precinct contains large areas of land identified as being bushfire prone.
- The precinct has a significant portion of land that is potentially flood affected, between Brisbane Grove Road and the Hume Highway; additional flood prone land may exist beyond current Flood Study.
- Proximity to Goulburn Airport could limit density of residential development.
- Proximity to Wakefield Park imposes a noise constraint on this precinct.
- On-site sewer cannot be within 100 m of a water course of any classification in the Sydney Drinking Water Catchment (SDWC) which will limit the density of rural residential dwellings in this precinct. Any development within the SDWC must have a neutral or beneficial effect (NorBE) on water quality.

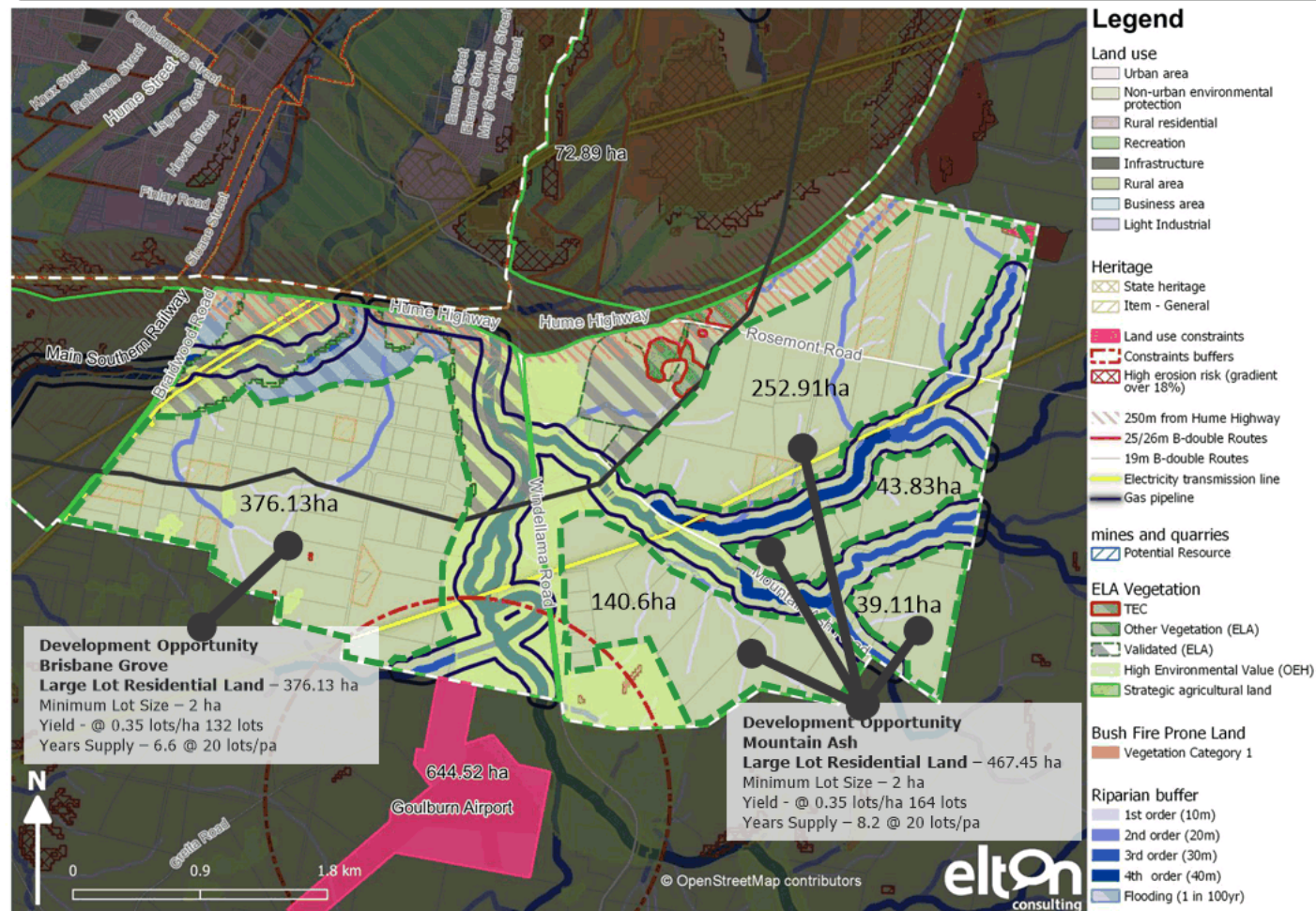
Analysis of Evidence

Suited to Large Lot Residential development subject the resolution of noise and water quality issues. Although no Aboriginal sites have been recorded to date, sites have been recorded to the west and south of this precinct. A comprehensive Aboriginal cultural heritage assessment is required. Opportunities for Precincts 10 and 11 have been considered together.

Recommendation

- Rezone the land that is least constrained by topography and environmental constraints to a Large Lot Residential zone (un-serviced).
- Priority – High

10/11 - Brisbane Grove & Mountain Ash constraints and opportunities



Precinct 12 Abattoir

Locality description

Area of rural lands south of the Hume Highway, surrounding the abattoir and the Mulwaree River.

Housing Gaps

Housing in association with rural land use.



Character & Planning Controls

Key residential typologies	Detached dwellings on single lots A small number of rural-residential lots
Land use zoning	RU1 Primary Production RU6 Rural Transition
Permitted residential typologies	Backpackers' accommodation, Bed and breakfast accommodation, dwelling house
Minimum lot size	100 hectares (RU1) 10 -20 hectares (RU6)
Heritage	Listed in GMLEP 2009: <ul style="list-style-type: none"> - I008 – Dwelling, "The Towers" (c 1840), 5477 Braidwood Road - I275 – Thorne's Bridge, Road Reserve, Mulwaree Ponds - I211 – "Oliver Goldsmith Inn", Hume Street - I171 – South Hill Complex, Early Homestead (c 1860), 3 Garroorigang Road - I243 – Barn (1870), 99–241 Mazamet Road <p>A number of Aboriginal sites have been recorded in this precinct. There is potential for Aboriginal objects to occur along and close to the Mulwaree River and watercourses.</p>

Land Use Opportunities and Constraints

Not currently serviced by water and sewer infrastructure:

- Water infrastructure is likely constrained due to water pressure and proximity to connection.
- Sewer infrastructure is likely constrained due to proximity to connection and likely requirement for a localised pumping station, some enlargement of downstream collection network likely to be necessary (subject to network modelling).

Environmental Constraints

- The majority of vegetation in the precinct has been removed for agricultural purposes and is therefore significantly disturbed and represents low ecological value.
- The precinct contains large areas of land identified as being bushfire prone.
- Proximity to Goulburn Airport and abattoir could limit density of residential development.
- Large area identified as being of heritage significance.
- Highway noise.
- Sections of slope over 18%.
- Water courses and potential flooding on the eastern side of the precinct.
- SLAWC assessments and SDWC requirement for development to have NorBE on water quality..

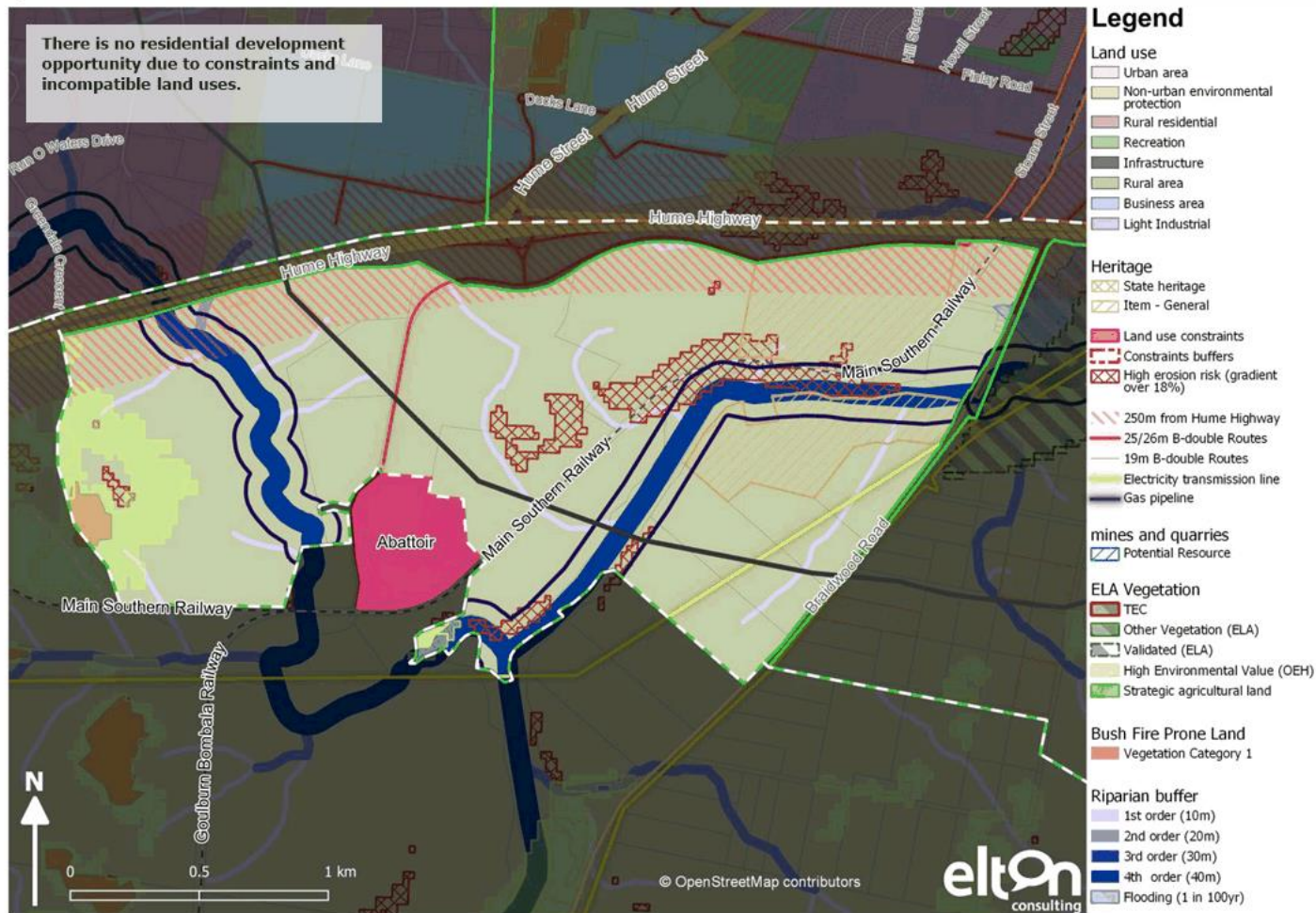
Analysis of Evidence

The presence of the abattoir in addition to other environmental constraints such as flooding on the eastern side of the precinct means this precinct is taken to be unsuitable for residential development.

Recommendation

- No Change.

12 - Abattoir constraints and opportunities



Goulburn overview

Who lives here?

The population of Goulburn was 13,739 people in 2016, representing 76% of the residents of Goulburn Mulwaree LGA. These people are accommodated in 10,038 dwellings, the majority of which are 3-4 bedroom single detached dwellings.

Demographic trends to 2016

- Increase in single-person households
- Ageing population

Housing Demand

- Goulburn will need to provide an additional 3,045 of the 3,500 dwellings required between now and 2036
- Demographic analysis suggests adaptable housing to allow people to age in place
- Fewer bedrooms for the increase in single-person households
- Affordable homes for those entering the housing market and downsizing
- More social housing to address long wait times
- Some evidence suggesting a demand for large lot residential development

Key Issues

- Spatial distribution and equity of access to various infrastructure in Goulburn Urban and Fringe precincts
- Central areas have a higher concentration of recreational facilities and social infrastructure
- Planning controls to address provision of infrastructure and housing in fringe areas
- Managing access to employment, enabling growth of industry to provide jobs for the growing population and strategically locating residential to avoid land use conflict
- Provide affordable housing choices



Legend

Precincts			
Urban	G - 1 Run 'o' Waters (existing)	G - 9 Mt Gray	G - 17 Eastgrove
Fringe	G - 2 Run 'o' Waters (rural north)	G - 10 Mountain Ash	G - 18 Central Goulburn
	G - 3 Baw Baw	G - 11 Brisbane Grove	G - 19 Iffield
	G - 4 Sooley	G - 12 Abattoir	G - 20 Correctional Centre
	G - 5 Middle Arm West	G - 13 Garfield	
	G - 6 Middle Arm East	G - 14 West Victoria Park	
	G - 7 Kenmore	G - 15 Marys Mount	
	G - 8 Gorman Rd	G - 16 Bradfordville	

Precinct 13 Garfield

Locality description

The Garfield precinct is located on the 'other side' of the ridge, and approximately 3km from the city centre, bounded by the Hume Highway in the south, Main Southern Railway line in the east and Addison Street in the north. Garfield is the main entrance to Goulburn from the south along Hume Street (including the Big Merino landmark).

Most of the precinct has a strongly suburban character that is very different from Goulburn's other urban precincts in terms of building size (workers' housing), simplicity (little detailing) and modesty of materials (many timber dwellings and some fibro cement dwellings with metal roofs, with comparatively few in brick). The western fringe of the precinct follows a north-south ridgeline and transitions to a large-lot residential character.

There is a variety of architectural and period styles across the precinct, indicating a collection of individual dwellings built up over time. Infill development is introducing different size, form and materials in dwelling design to the Garfield precinct.



Character & Planning Controls

Key residential & business typologies

Smaller houses in a range of colours (mostly lighter colours) typically of simple 'box' or forward bay type. Front gardens set to lawn with smaller scale edge planting and no or low front fences. Small to medium street trees add amenity and appeal to streetscapes within the precinct. The B6 and IN1 zone built form is typically big box retail (e.g. BCF, Bunnings), car sales, very large sheds.

Land use zoning

B6 Enterprise Corridor
R1 General Residential
R5 Large Lot Residential
RU2 Rural Landscape
E4 Environmental Living
RE1 Public Recreation
RE2 Private Recreation
IN1 General Industrial

Permitted residential typologies

Attached dwellings; Bed and breakfast accommodations; Boarding houses; Dwelling houses; Group homes; Hostels; Multi dwelling housing; Residential flat buildings; Semi-detached dwellings; Seniors housing; Serviced apartments; Shop top housing; Secondary dwellings

Minimum lot size

700sqm (R1)
2000sqm (R5)
10,000sqm (E3)
8,000sqm and 2Ha (E4)
100Ha (RU2)

Heritage

Locally listed in GMLEP:

- Goulburn Workers Club Sports Arena
- Residences at 216 and 202 Addison Street
- Christchurch 130 Addison St
- 47 Combermere St
- 10 Cowper St
- 20 Lisgar St

A number of Aboriginal sites have been recorded along the western and southern boundaries of this precinct.

Land use Opportunities and Constraints

The topography of the Garfield precinct is sloping, with a mix of street widths. Lots are generally narrow with a large open space to built area ratio that gives a feeling of openness to the streets. Some large vacant/undeveloped parcels enable views through blocks; where this occurs it further enhances the openness of the streetscape.

Garfield's character varies north and south of Hume Street. North has newer residential stock and easy access to Goulburn West Public School and St Peter & Paul's Primary School, while South is more business and industrial. Residents south of Hume street have a green corridor but need to travel for services.

Goulburn South Caravan Park offers affordable housing where permanent residents own their dwelling and lease the site (Community title development). The area containing the caravan park (SA1:10105153954) has a SEIFA score of 769, one of the lowest in Goulburn. This is potentially an emerging residential community and likely to be an older demographic.

Some heritage items which could be considered in any future redevelopment for retention (i.e. St John's Orphanage Site). Vacant and undeveloped areas planned for redevelopment will require a comprehensive Aboriginal cultural heritage assessment.

There is an opportunity to consider the application of the R3 Medium Density Residential zone close to the city centre.

Due to constraints including slope, proximity to Hume Highway and watercourses, the area of RU2 zoned land (Dossie Street area) is not considered suitable for urban use.

Housing Gaps

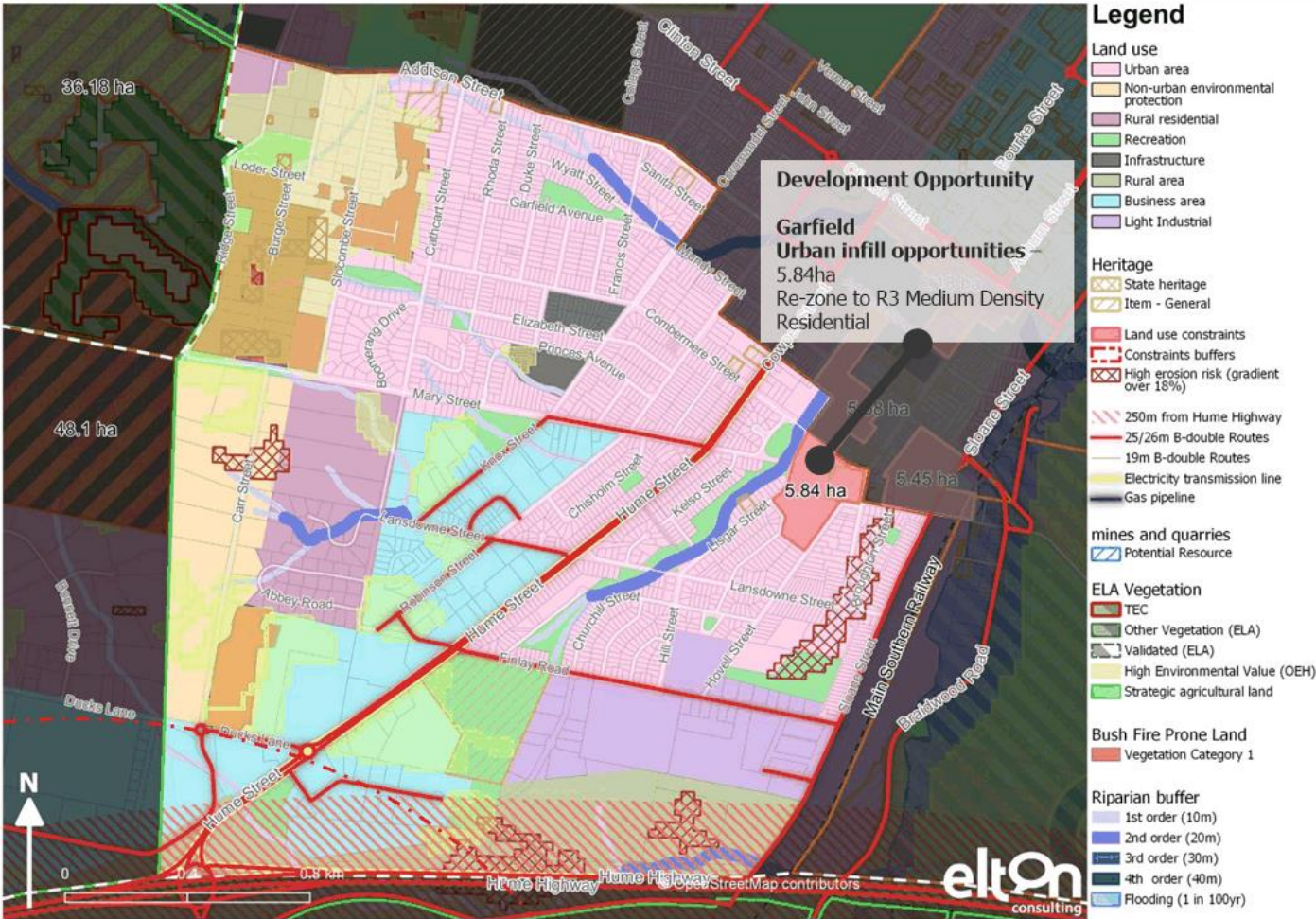
Affordable housing

Medium density infill housing is suitable for this precinct due to proximity to schools, parks and the city centre.

Recommendations

- Some large vacant/undeveloped parcels of land available for infill urban residential; also, depending on servicing, some lots could be rezoned and subdivided in future.
- Re-zone opportunity area which borders Central Goulburn to R3 Medium Density Residential.

13 - Garfield constraints and opportunities



Precinct 14 West Victoria Park

Locality description

Formerly known as 'Western', West Victoria Park starts at Deccan Street (including Victoria Park) in the east where the precinct joins Goulburn CBD and extends west to the Baw Baw fringe precinct, bounded by the Wollondilly River and Fitzroy Street in the north and east.

This precinct lies astride the hills overlooking Goulburn, with some panoramic views contributing to a strong sense of place. This precinct is generally characterised by curvilinear streets along the land contours, giving streetscapes where one side of the street is higher than the other. Setbacks vary but are typically more generous than in the rectilinear streets of the older subdivisions.

Facilities within the precinct are Victoria Park including the Aquatic Centre, Goulburn Highschool, Wollondilly Public School, The Crescent School (special education), Trinity Catholic College, TAFE, Historic Waterworks Museum and Marsden Weir Park and Simon Poidevin Park.

Recommendations

- The north-western corner contains already-subdivided but yet to be developed residential lots. This area is zoned R5 with a MLS of 2000sqm. Consider rezoning this area to accommodate a smaller minimum lot size and more efficient utilisation of water and sewer infrastructure.
- Areas planned for development such as vacant and undeveloped lands will require a comprehensive Aboriginal cultural heritage assessment.

Character & Planning Controls

Key residential typologies	Single storey detached dwellings.
Land use zoning	R1 General Residential R5 Large Lot Residential RE1 Public Recreation RE2 Private Recreation SP2 Infrastructure
Permitted residential typologies	Attached dwellings; Boarding houses; Dwelling houses; Group homes; Multi dwelling housing; Residential flat buildings; Semi-detached dwellings; Seniors housing; Serviced apartments
Minimum lot size	700sqm (R1) 2000sqm (R5)
Heritage	<ul style="list-style-type: none"> State Significant and EPI Heritage area around Marsden Weir and Historic Waterworks impacts land on the southern bank of Wollondilly River (72 Fitzroy St) 221 Wheeo Rd (Historic water treatment pond) EPI Heritage 147 Addison Road (Trinity College) 24 Gilmore Street (historic residence) 2 View Street (TAFE) 134 Faithfull street (Aquatic Centre) 74, 78, 100 and 104 Decan Street (historic residences) 8 Mount Street (historic residence) <p>A number of Aboriginal sites have been recorded along the northern boundary of this precinct. Potential for objects to occur along and close to Wollondilly River.</p>

Housing Gaps

Affordable housing

Medium density infill housing is suitable for this precinct due to proximity to schools, parks and the city centre.

Land use Opportunities and Constraints

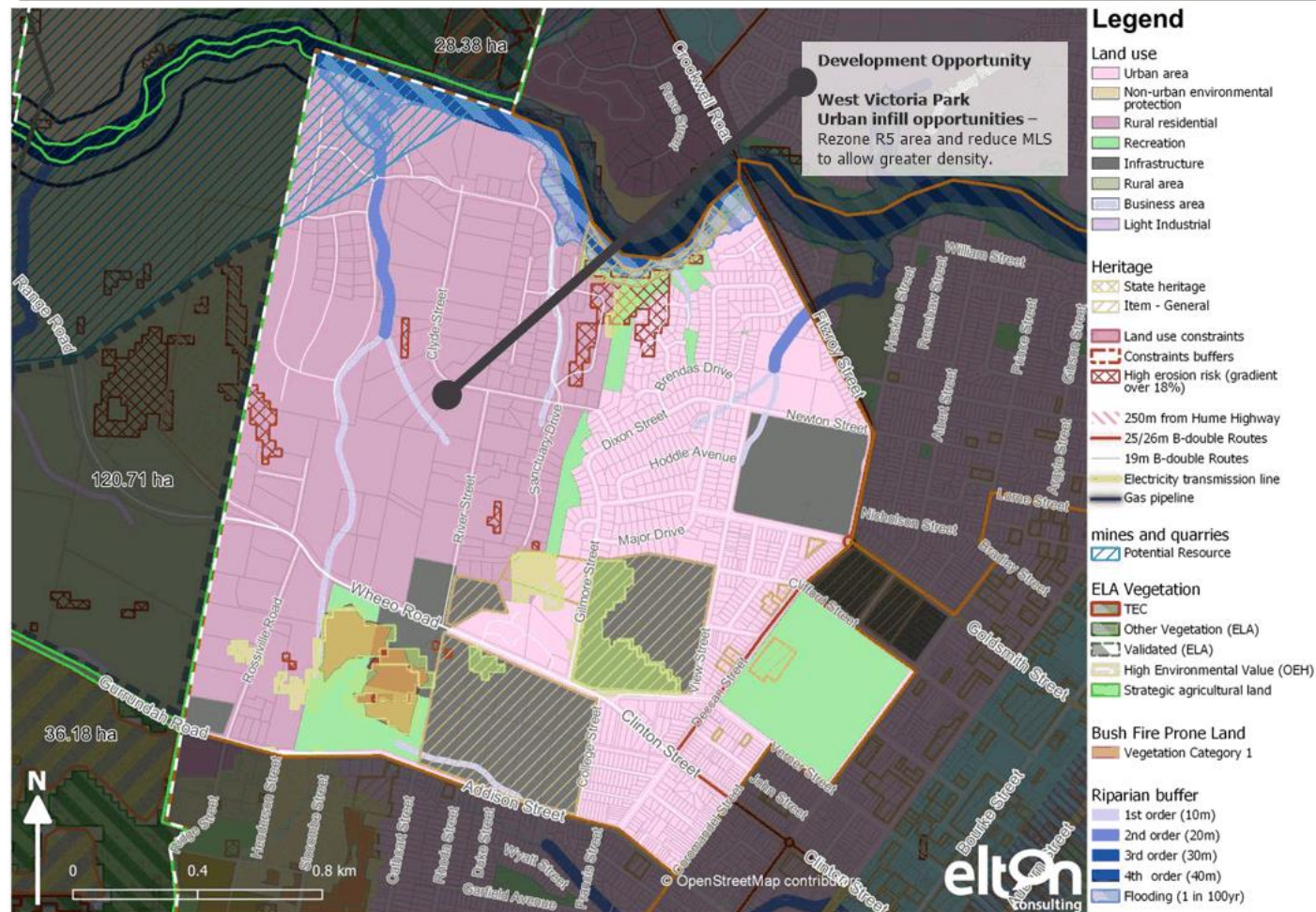
Existing parks are distributed towards the east of the precinct, so land impacted by the riparian lands buffer in the west could be utilised as linear parks through newer residential area with reduced MLS.

Analysis of Evidence Base

This precinct contains the most relatively advantaged area (SA1:10105153955) in Goulburn, with a SEIFA score of 1115. The newer area (mainly zoned R5) of SA1:1153922 is also one of the more relatively advantaged areas of Goulburn, with a score of 1066. The most relatively disadvantaged area of the precinct is SA1:10105153917 (immediately adjacent to the Central Goulburn precinct) with a score of 908.



14 - West Victoria Park constraints and opportunities



Precinct 15 Marys Mount

Locality description

Marys Mount has grown significantly in the past decade, expanding to accommodate almost the full extent of currently zoned Low Density Residential.

This precinct typically comprises curvilinear streets with culs de sac. Recent development within the precinct is also distinctive because of its relative isolation from the central Goulburn urban area.

The precinct is characterised by having little mature vegetation within private open space areas. Street trees are yet to establish and development has occurred in an ad hoc manner without the benefit of a neighbourhood structure plan to guide growth.

Marys Mount Road is characterised by gun barrel fencing as planning development controls fail to keep pace with and manage development outcomes.



Character & Planning Controls

Key residential typologies	Detached dwellings on single lots, generally single storey in height with rendered/face brock facades and tiled roofs
Land use zoning	R2 Low Density Residential R5 Large Lot Residential RE1 Public Open Space B1 Neighbourhood Centre
Permitted residential typologies	Boarding houses; Dwelling houses; Group homes; Shop top housing
Minimum lot size	700sqm and 2000sqm
Heritage	Listed in GMLEP: 124 Marys Mount Road (Former Catholic Monastery) This building has been converted to 25 residential Strata Units of 1-2 bedrooms. A large number of Aboriginal sites have been recorded in this precinct as part of previous subdivisions. Potential for Aboriginal objects to occur along and close to the Wollondilly River.

Housing Gaps

Medium density and affordable housing is largely missing from this precinct as it is dominated by R2 Low Density Residential land, with housing typology largely single storey detached dwellings.

Land Use Opportunities and Constraints

Marys Mount contains a number of educational facilities including the Police College/Charles Sturt University Goulburn Campus, Lilac Early Learning Centre (daycare) and Mulwaree High School. Warrigal Aged Care Service is also located within the precinct.

Much of this precinct has already been developed at a fairly low density. An example of increasing housing diversity is the historic monastery which has been converted to one and two bedroom units.

The SP2 zone encompassing Mulwaree High School – approximately 35ha, also contains a Field Studies Centre for use by students from Mulwaree High School, as well as students at all district schools.

SEIFA scores for SA1 areas within Marys Mount vary between 696 (the most relatively disadvantaged area in Goulburn) adjacent to the Police College, and 1033 in the newer area adjacent to Mistful Park neighbourhood centre.

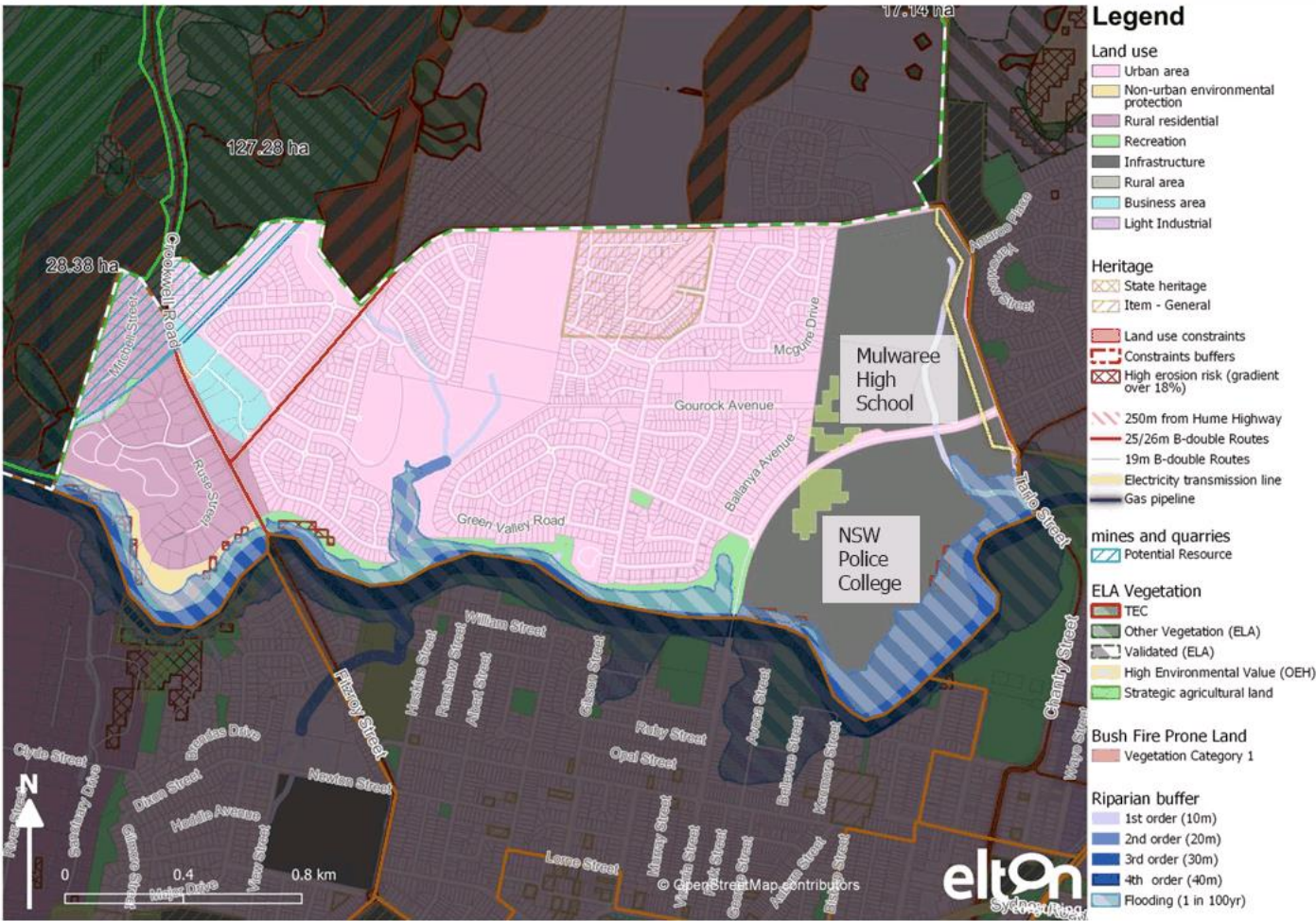
The Wollondilly Walking Track through the RE1 zoned land along river serves to link existing open space in the precinct. There is an opportunity the amenity of open space. Once completed, Riverside Park will become a regional park.



Recommendations

- Encourage infill development of residentially zoned land.

15 - Mary's Mount constraints and opportunities



Precinct 16 Bradfordville

Locality description

The topography of the Bradfordville precinct is generally flat. The precinct has a predominantly suburban character, consistently modest in bulk and scale though mixed in age, materials and colours. The Bradfordville precinct is part of the original character area 7 in the 1983 Heritage Study.

The north east of Bradfordville has a mixture of loose/distorted grid with some curvilinear streets and cul-de-sac.

The northern portion of the precinct has a suburban fringe character, with houses backing on to fields, with wide vistas and scattered detached dwellings beyond.

Houses in this precinct are built in a mix of materials, including brick (red and blonde) with tiled roofs, and timber typically with iron roofs; generally inter-war period with some 1960s fibro, and recently constructed houses.

Dwellings comprise simple forms, either forward bay or 'box' cottages – generally single storey. New dwellings are interspersed across the precinct, but are generally built closer to side boundaries, some with attached garages.

There are some street trees in the precinct, ranging from small to medium in size. There are however some streets with no trees. Many streets do not include footpaths, creating a sense of the front garden flowing out to the street. Newer areas have roll kerbs.

Housing Gaps

Some recent infill does not allow for tree cover and will contribute to urban heat island effect. Additionally, standard housing design requires artificial heating and cooling, which can be unaffordable for low income households (typical of Bradfordville) and not resilient to Climate Change.



Character & Planning Controls

Key residential & tourist typologies	Typically detached dwellings on single lots, with large front setbacks and low or no front fences.
Land use zoning	R2 Low Density Residential R5 Large Lot Residential RE1 Public Recreation E2 Environmental Conservation E3 Environmental Management IN1 General Industrial IN2 Light Industrial RU2 Rural Landscape SP2 Infrastructure
Permitted residential typologies	Boarding houses; Dwelling houses; Group homes; Bed and Breakfast accommodation; Caravan parks; Secondary dwellings; Rural workers' dwellings.
Minimum lot size	700sqm (R2) 2000sqm (R5) 100Ha (E3 and RU2)
Heritage	State and Locally listed Kenmore Asylum Heritage Conservation Area. Items I293, I304, I292, I291 in Schedule 5 of GMLEP are also within this precinct. Aboriginal sites have been recorded within the north eastern area of this precinct. Potential for Aboriginal objects to occur along and close to Wollondilly River.

Recommendations

- Encourage appropriate infill development of residentially zoned land.
- Areas planned for development must have a comprehensive Aboriginal cultural heritage assessment and ecological assessment.
- Priority – Medium/High

Land Use Opportunities and Constraints

Bradfordville has a Medical Centre, Public School and Christian school (One School Global). There is also a NDIS service provider and a TAB Tavern. Craig's Hill Crematorium Chapel is collocated with an active Cemetery in the north west of the precinct off Middle Arm Road.

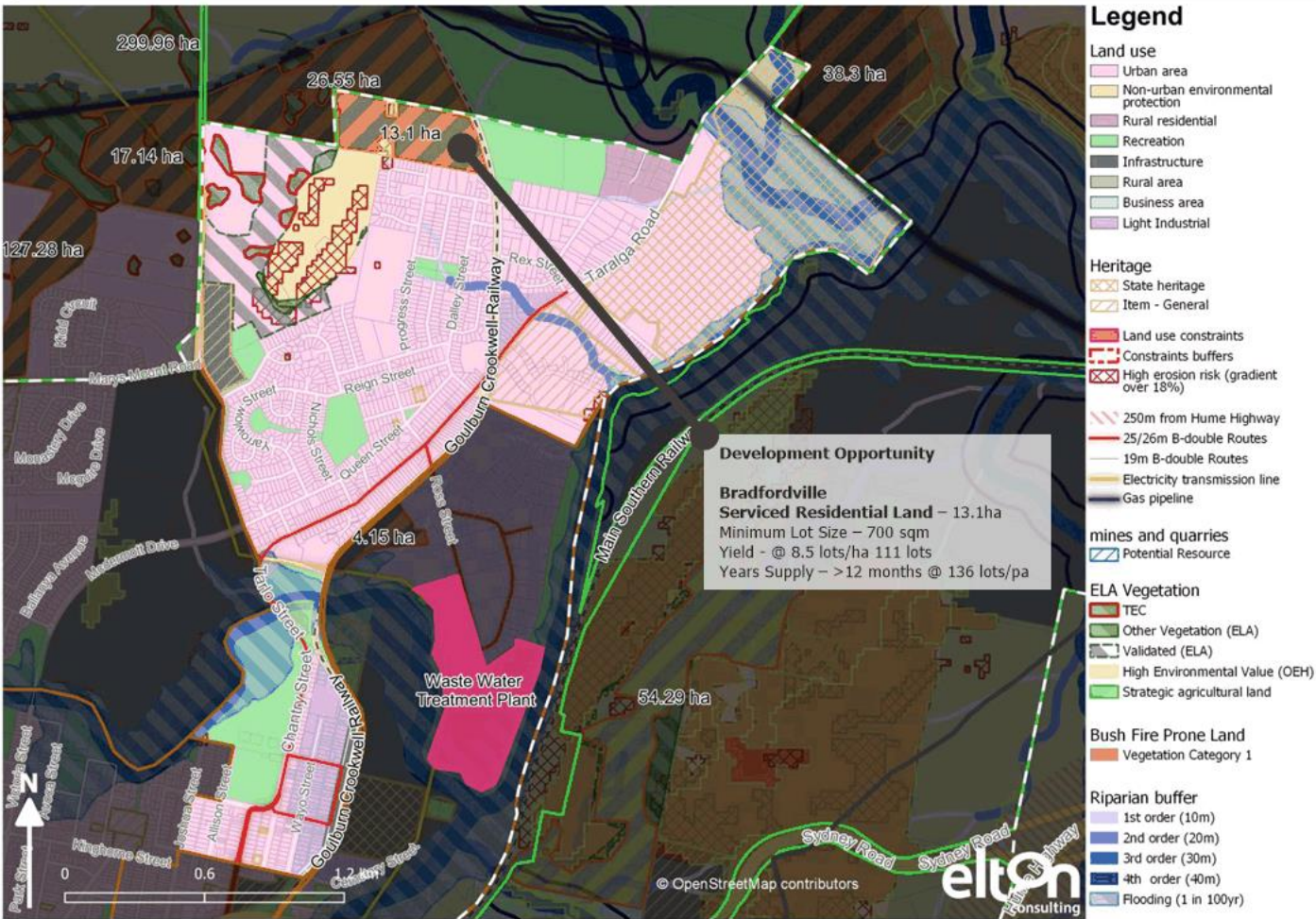
Recreational opportunities include a Swim School, Cookbundoon Sporting Complex, an oval and smaller parks. There is a Golf Course and North Park in the southern area near Ifield. Additionally, the Goulburn-Crookwell Railway traverses the precinct and could be redeveloped as a rail trail/ active travel link.

Bradfordville is a social housing area with SEIFA scores ranging between 769 and 957 across the precinct's SA1 areas indicating high relative disadvantage.

There is a recent residential subdivision of the block containing historic Liminis House, adjacent to the Kenmore Asylum HCA.



16 - Bradfordville constraints and opportunities



Precinct 17 Eastgrove

Locality description

Set apart from the town on the eastern side of the Mulwaree River, Eastgrove has a distinct physical and visual separation from the central Goulburn retail centre. The Eastgrove residential area lies mainly above the flood plain and against the backdrop of the War Memorial hills, with panoramic views back towards Goulburn along East West streets, from higher level homes, and between buildings. The Eastgrove precinct is characterised by a regular grid laid over the west-facing slope with terminating North-South streets connected by two main East-West streets (Park Road and Glenelg St). Terminating streets have a 'cul de sac' character that give a sense of privacy and seclusion and contribute to the 'separate' character of the precinct.

On the lower slopes there are a number of significant older buildings, often on large lots and/or with undeveloped land around them, which add a strong historical and semi-rural character to the Eastgrove precinct.

On the higher slopes are newer dwellings, conventional in design, whose brick veneer, low-pitched tiled roofs and landscaping treatment contrast with the nature of the older parts of the neighbourhood.

Housing Gaps

Single detached dwellings dominate the precinct, however in this case this is the most appropriate typology.

Recommendations

- Due to the significant constraints, further residential development is not recommended in this precinct.
- No changes to zoning are recommended for this precinct.

Character & Planning Controls

Key residential typologies	Newer dwellings have a larger footprint and smaller rear yard.
Land use zoning	RU2 Low Density Residential R1 General Residential RE1 Public Recreation E2 Environmental Conservation E3 Environmental Management B6 eEnterprise Corridor IN1 General Industrial
Permitted residential typologies	All residential typologies are permitted across the R1 and R2 zones
Minimum lot size	100Ha (RU2 and E2 and E3) 700sqm (R2 and R2)
Heritage	Listed in GMLEP: <ul style="list-style-type: none"> - 12 Braidwood Rd (State Heritage & EPI) Goulburn Locomotive Roundhouse - 8 and 11 Cooma Ave, and 8 Ottiwell Street – historic residences - 3-31 Bungonia Road (SHR & EPI) and extending SHR curtilage east across the river – steam mill - 33 Bungonia Rd (SHR & EPI) – Lansdowne Park - Historic residences at 9, 15-17, and 24 Hercules Street, 95 Park Rd, 29 Emma Street, 56 May Street - Sloane Street (train station) state heritage register curtilage - Goulburn Wetlands heritage area - 141 May Street (residence) A large number of Aboriginal sites are recorded within this precinct including significant sites within Rocky Hill and Lansdowne Park areas. Potential for Aboriginal objects to occur closer to the Mulwaree River.



Land Use Opportunities and Constraints

The Western and Southern portion of Eastgrove is highly flood prone and experiences upstream backwatering effects of the Mulwaree River's confluence with the Wollondilly River which can result in isolation from the town centre.

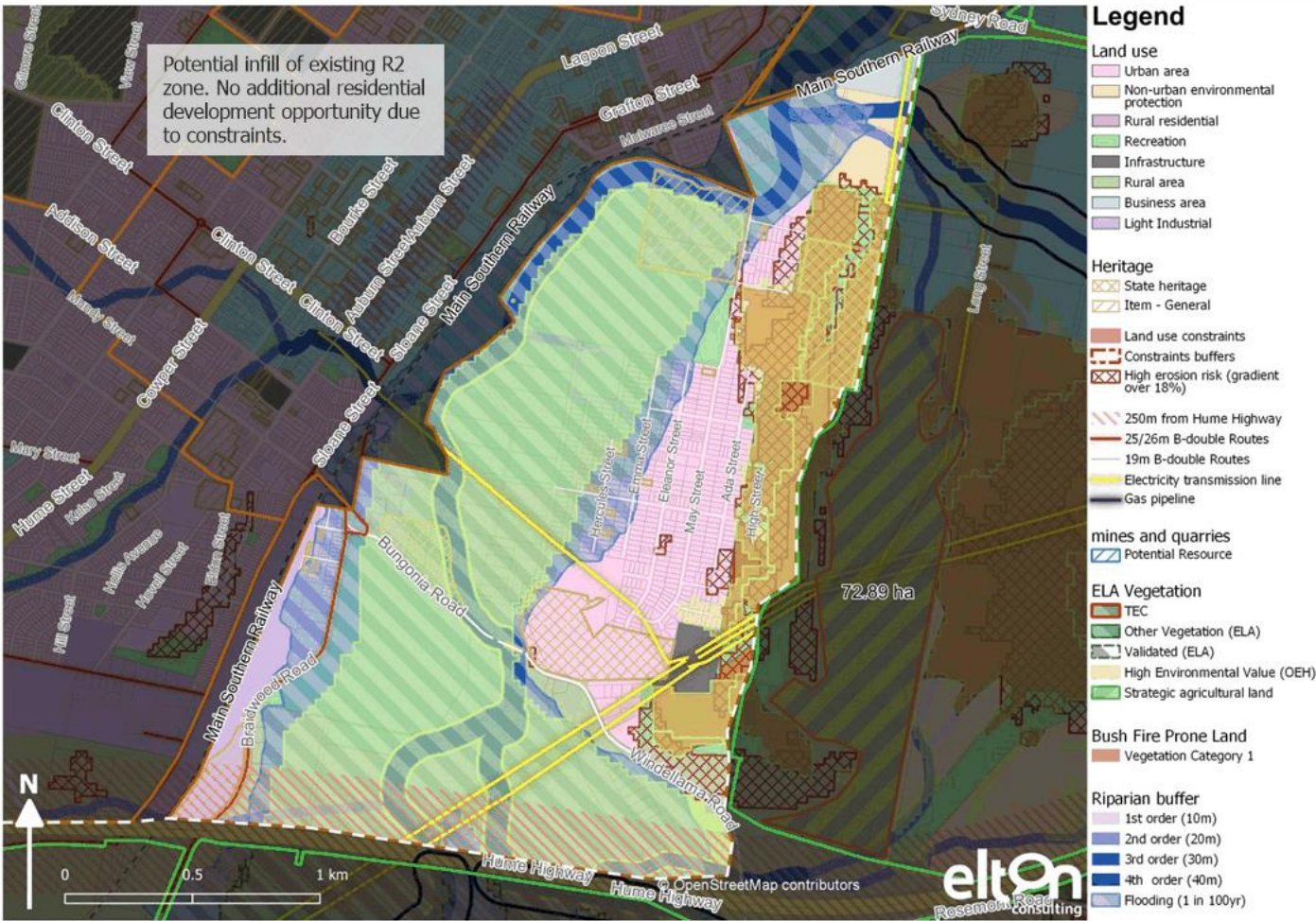
The northern extent of the General Industrial land along Braidwood road is also subject to flooding (1%AEP). Eastgrove's northern portion contains the Rocky Hill War Memorial reserve which has steep slopes (gradient over 18%). Bushfire is a significant hazard along Rocky Hill which is mapped as category 1 vegetation.

There are significant social infrastructure and recreational facilities within the precinct including:

Goulburn Brewery, Harness Racing Club, Goulburn Recreation Area, Goulburn Rail Heritage Centre, Goulburn Basketball Centre, Rocky Hill War Memorial and Museum, Goulburn Golf Club, Eastgrove Park, Goulburn East Public School, Bartlett Park, netball courts and Carr Confoy Oval, Goulburn Wetlands park & community garden, and Goulburn Academy of Early Learning (childcare).

Much of the flood prone area of Eastgrove is also mapped as HEV in recognition of the importance of riparian corridors as ecological habitat and water catchment quality.

17 - Eastgrove constraints and opportunities



Precinct 18 Central Goulburn

Locality description

The CBD of Goulburn is bounded by the train line and Mulwaree River to the east, and Victoria Park to the west. The precinct includes Goulburn Hospital and Goulburn High School but not Victoria Park. Goulburn Central is surrounded by the precincts of Eastgrove, Garfield, East Victoria Park and Ifield.

The concentration of individual heritage items and the blanket Heritage Conservation Area characterise this whole area.

The access to retail areas, facilities and services together with the formal grid pattern contribute to the desirability for increased densities. However, any redevelopment will need to consider the Heritage Conservation Area.



Character & Planning Controls

Key residential & tourist typologies	Detached dwellings on single lots, Retirement village, Hotel / pub accommodation, Motels, Train station, Belmore Park
Land use zoning	R1 General Residential B3 Commercial Core B4 Mixed Use RE1 Public Recreation SP2 Infrastructure IN1 General Industrial
Permitted residential typologies	Attached dwellings; Bed and breakfast accommodation; Boarding houses; Dwelling houses; Group homes; Hostels; Multi dwelling housing; Residential flat buildings; semi-detached dwellings; Seniors housing; Serviced apartments; Shop top housing;
Minimum lot size	700sqm (R1), however many existing lots are smaller than this.
Heritage	A heritage conservation area applies to the city centre. Potential for Aboriginal objects to occur along and close to Mulwaree River.

Housing Gaps

Medium density residential infill development is needed in the city centre to:

- Assist with the reinvigoration of the centre more generally, as it would serve to increase foot traffic and make business more viable without increasing road traffic,
- Better cater to the aging population of the LGA and increasing single person households,
- Increase housing choices and affordability in the city for example, Shop top housing and Apartments.

Land use Opportunities and Constraints

The centre of Goulburn offers the opportunity to diversify the types of housing available in Goulburn. Convenient access to retail, health and other services makes it the most suitable area in Goulburn Mulwaree LGA for the provision of medium density and seniors housing.

Includes the Hospital and Goulburn High School.

The minimum lot size may act as a disincentive to development in general and medium density housing in particular.

Fragmented ownership of small lots makes it difficult for a developer to amalgamate enough land to deliver a medium or high density development.

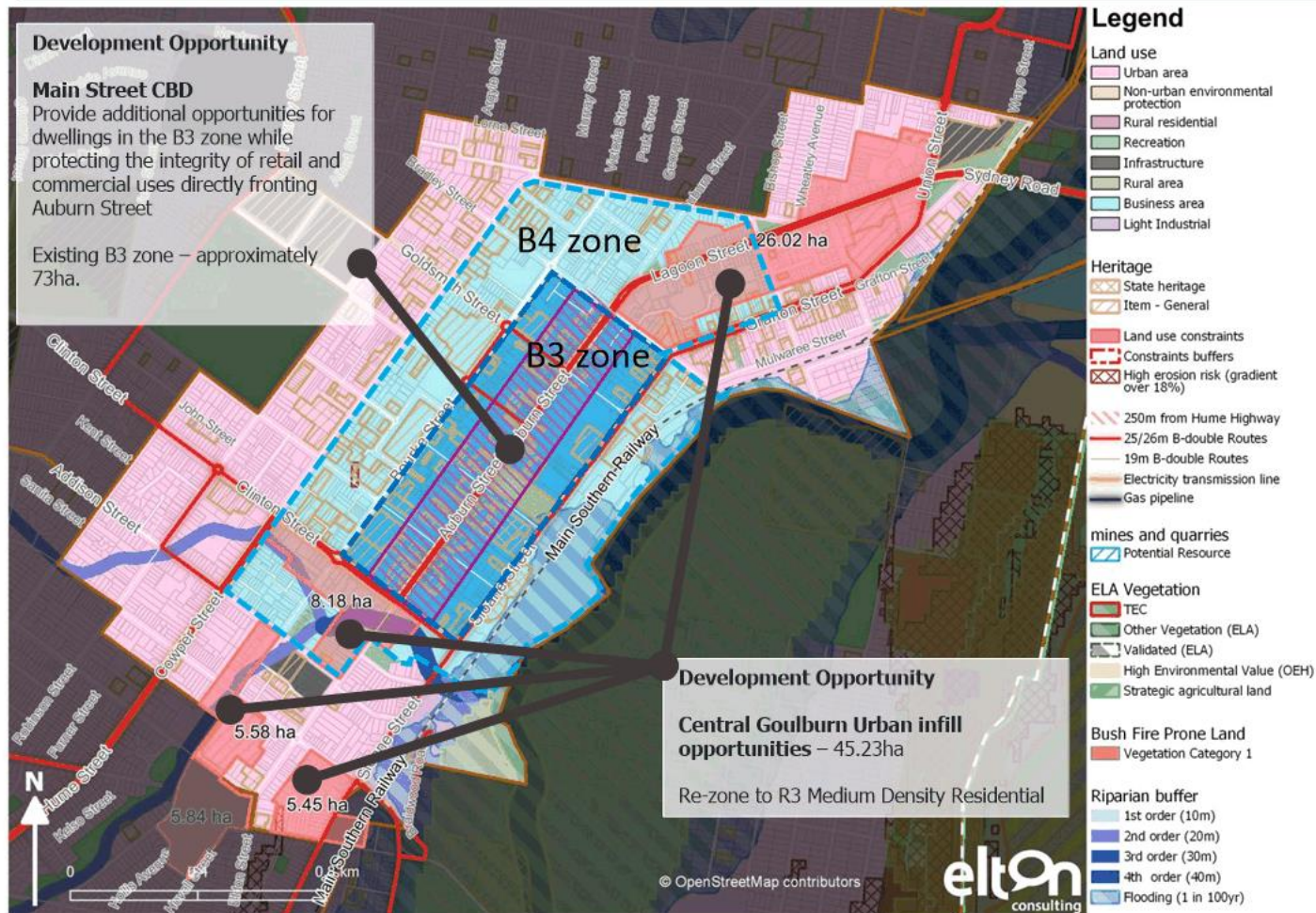
Heritage is a significant constraint to redevelopment, but also an important attractor to the city and defining characteristic.

No Aboriginal sites have been recorded in this precinct to date, however, potential for Aboriginal sites to occur should be considered during any proposed development within this precinct.

Recommendations

- There is an opportunity to encourage redevelopment within the Goulburn City Centre by rezoning certain land R3 Medium Density Residential. The distinctive zone would likely retain a similar land use table of permissible uses as the R1 General Residential zone, however, the objectives could be better expressed to recognise the intended outcome. Requirements such as carparking, floor space ratio, height and private open space could also be tailored. The separate zone allows for DCP controls specific to the R3 zone as distinct from the other residential zones giving Council the flexibility to provide incentives for development closer to the centre of the city.

18 - Central Goulburn constraints and opportunities



Precinct 19 Ifield

Locality description

This precinct is characterised by a regular grid pattern with rectangular blocks and narrower streets than the town centre. Within the precinct, Kinghorne Street acts as a distinctive character boundary.

South of Kinghorne Street, buildings tend to be older and larger; with a consistent streetscape of smaller front and side setbacks; rows of houses are built to a similar 'pattern' (reflecting subdivision/ development by the same builder); slightly more complex building and (gable end) roof forms, particularly to Federation houses; and materials are predominantly brick and tile.

North of Kinghorne Street, towards the river, building forms are more simple and modest, somewhat more varied, and roofs tend to be hipped. The portion of the precinct between Chatsbury and Wilmot Streets is almost a sub-precinct. This portion of the precinct continues the grid and very wide streets of the town centre, which in combination with the modest housing stock creates an impression of great spaciousness. The lack of street trees in this area to break down the large scale of the streets exaggerates this effect. East of Kinghorne Street the grid is further broken down with the introduction of rear lanes.

Recommendations

- Encourage redevelopment of existing larger lots through existing GMLEP controls

Character & Planning Controls

Key residential & tourist typologies	The architecture of detached houses within the precinct span Federation to post-war periods. Dwellings in this precinct tend to have low or no front fences, which are often brick with brick houses. The use of street trees varies. There are some mature street trees, with well landscaped and tended front gardens. Recent townhouse development in the precinct have tended to adopt a 'gunbarrel' lot layout and which has tended to be visually intrusive, have vast expanses of hard surfaces, minimal landscaping and high solid front fences.
Land use zoning	R1 General Residential RU2 Primary Production RE1 and RE2 Public and Private Recreation
Permitted residential typologies	All residential typologies are permitted across the R1 and R2 zones
Minimum lot size	700sqm 100Ha (RU2)
Heritage	A number of heritage items are listed in schedule 5 of the GMLEP. No Aboriginal sites have been recorded to date. Potential for Aboriginal objects to occur along and close to the Wollondilly River and should be considered during any proposed redevelopment.

Housing Gaps

Single detached dwellings dominate this precinct and there is lack of dwelling typology diversity.

Land Use Opportunities and Constraints

Proximity to CBD, predominantly R1 residential
Some Recreational areas including Wollondilly River corridor
Other key land uses include; PCYC Goulburn and a number of parks and recreation areas.

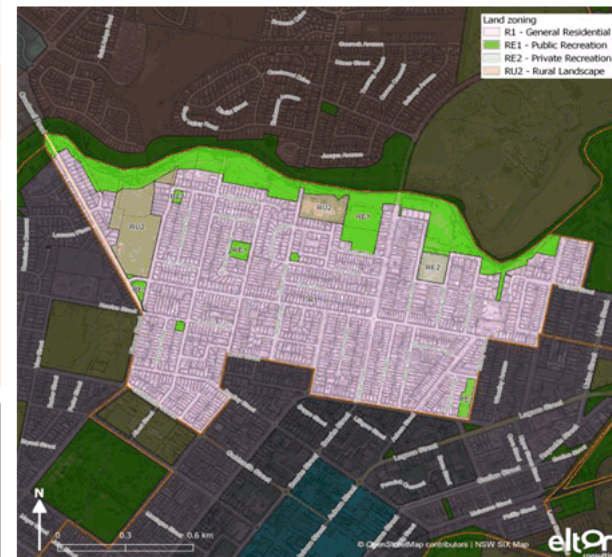
Flooding is the most significant constraint to redevelopment.

Analysis of Evidence Base

The RU2 zones are undersized at approximately 2ha and 7ha (MLS 100Ha).

Potential for infill in areas, for example:

- DP37418 (M) plus part of adjoining lot (vacant) totals 2,725sqm so could yield around 5 lots at 400 to 450sqm. This would require a reduced MLS.
- Room for a terrace house development along Show Street using backyards of houses along Prell Street.
- Vacant blocks behind Goodstart Early Learning, access via Erith Street.



19 - Ifield constraints and opportunities



Precinct 20 Correctional Centre

Locality description

River and rail corridors define this precinct, which contains the confluence of the Wollondilly and Mulwaree Rivers. The Main Southern Railway borders the precinct in the south and east, while the disused Goulburn-Crookwell Railway forms the western border. The Old Town of Goulburn was located at the rivers confluence before being relocated to the current CBD location in the 1830s due to flooding.

Key Infrastructure uses within the precinct are the Goulburn Correctional Centre and Sewerage Treatment Plant, located on opposite banks of the Wollondilly River. The newly modernised sewerage treatment plant is located in the centre of the precinct. Odour is not considered to be a development constraint now that the new STP is operational.

Recommendations

- This precinct is largely unsuitable for residential development due to its land use and flood constraints.



Character & Planning Controls

Key residential typologies	Historic residence, Correctional Centre,
Land use zoning	RU2 Primary Production R1 General Residential RE1 Public Recreation RE2 Private Recreation SP2 Infrastructure IN1 General Industrial B6 Enterprise Corridor
Permitted residential typologies	All residential typologies are permitted across the R1 and R2 zones
Minimum lot size	100Ha (RU2) 700sqm (R1)
Heritage	<ul style="list-style-type: none"> State heritage listed Goulburn Gaol, Victorian Classical Revival (c 1883) State heritage listed Dwelling, "Riversdale", Single Storey, Georgian (c 1840) Locally listed St Saviours cemetery (GMLEP) Locally listed Mortis Street Cemetery (GMLEP) <p>Aboriginal sites have been recorded along the powerline easement.</p>

Housing Gaps

There is potential for 14 – 24 urban infill residential lots to be provided between Brewer and Ross Street pending a more detailed site suitability analysis. Including a B6 zone in this area of the precinct increases the opportunities to live and work in close proximity.

Land Use Opportunities and Constraints

This precinct experiences significant mainstream flooding from both the Wollondilly and Mulwaree Rivers. Major Overland Flow (MOF) flood mapping is being undertaken as part of the new floodplain risk management study and plan, but is not yet available. The industrial area in the north is unconstrained by mainstream flooding (1% AEP).

Heritage items are located on the western side of the rivers' confluence:

- 'Riversdale' is a state heritage listed farming and grazing homestead complex located at the Northern edge Old Town of Goulburn.
- Goulburn Correctional Centre complex, now a 'supermaximum' security prison for males, is listed on the New South Wales State Heritage Register as a site of State significance as one of two model prisons designed by the Colonial Architects Office in the late 1870s and early 1880s.
- St Saviours cemetery was Goulburn's first cemetery, in use from c.1830 to 1937.
- Mortis Street cemetery was used from the 1840s until 1903 (Cemetery Plan of Management 2012, GMC). Both cemeteries are heritage listed in the GMLEP 2009.

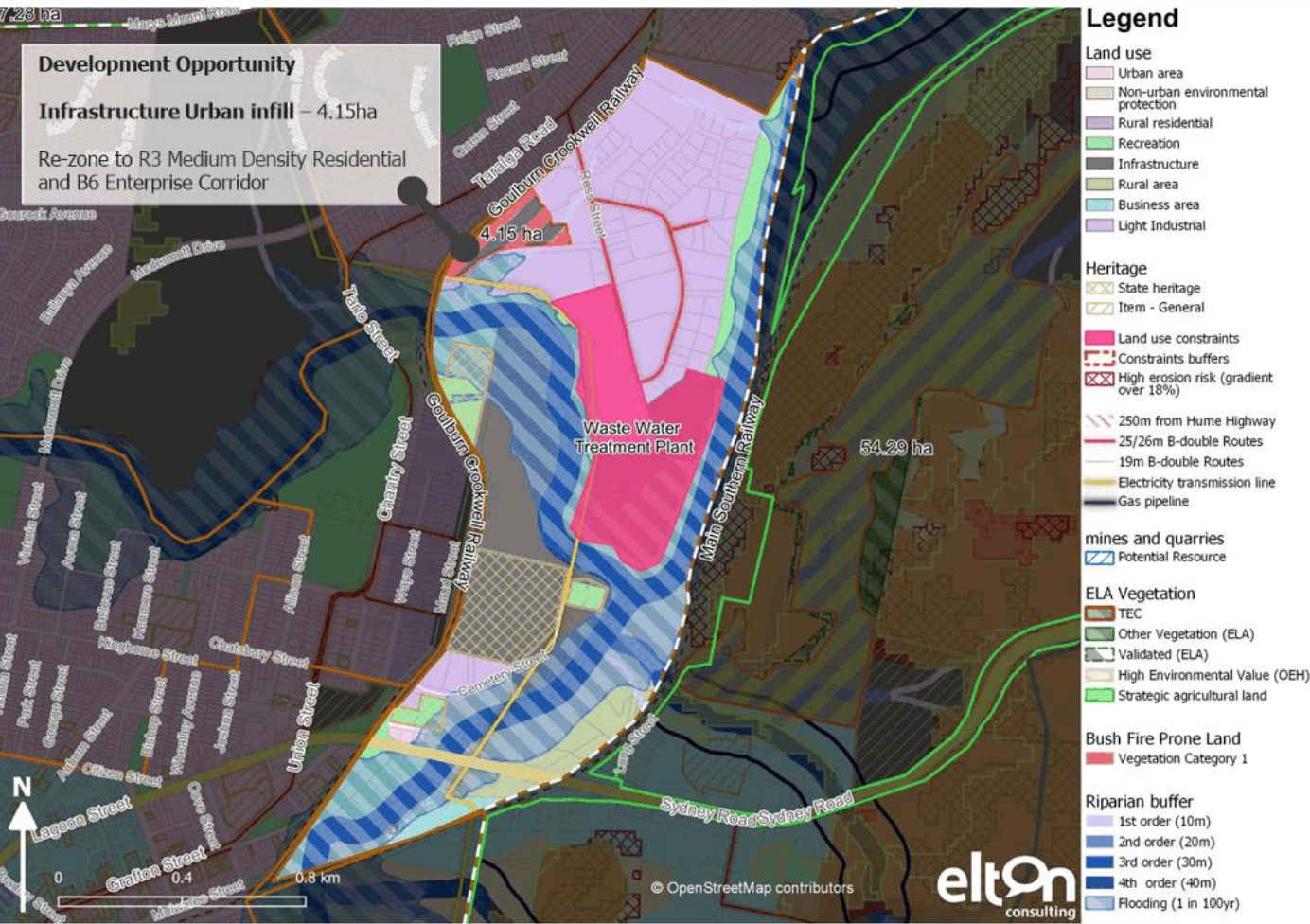
An area of land between Brewer and Ross Street is currently being considered by Council for a split zoning of B6 and R1 General Residential. This land is outside the 1% AEP mainstream flood area but is impacted by the PMF mainstream flood extent (2016 Flood Study). It is separated from the residential area of Bradfordville by the disused Goulburn-Crookwell Railway and would require an extension of Brewer street across this rail corridor for residential access. The future use of the Goulburn-Crookwell Railway should be determined prior to approving any roads crossing the rail corridor.

Potential for Aboriginal objects to occur along and close to the Mulwaree and Wollondilly Rivers. Any future plans for development will require a comprehensive Aboriginal cultural heritage assessment.

An electricity transmission line easement runs through the precinct and crosses the rail corridor at approximately the same point as the proposed road extension. The outcomes of the MOF flood mapping should also inform Council's consideration of this site's suitability for residential infill / B6 enterprise development.

A community solar farm is proposed for a 2.5 ha site off Bridge St, between Sydney Rd and the Main Southern Railway line by Community Energy 4 Goulburn (GE4G). The site is currently zoned B6 – Enterprise Corridor.

20 - Correctional Centre constraints and opportunities



Precinct 1 Marulan Town Centre

Locality description

Marulan developed around providing goods and services as a highway town. The town centre was bypassed in 1985 and is located on the western side of the Hume Highway. Marulan provides roadside services to passing traffic on the Hume Highway. Marulan has a diversity of land uses, including residential, shops, hospitality, places of worship, health services, public education and recreation.

Marulan features a number of historically notable buildings, particularly along George Street, many of which are heritage listed. Residential lots are typically narrow and long with dwellings at the front and substantial rear yards. These lots are typically in the order of 1,500sqm. There are a number of undeveloped lots within the town centre precinct.

The *Draft Marulan Village Plan 2018* outlined a shared community vision:

"That Marulan be a diverse, vibrant, growing and attractive village that is successful and affordable to live, work and play with the infrastructure to accommodate."



Character & Planning Controls

Key residential & business typologies	Single detached residential dwellings. Single detached shops and businesses, primarily along George Street south of the railway line.
Land use zoning	B2 Local Centre B6 Enterprise Corridor R1 General Residential R2 Low Density Residential RE1 Public Recreation IN1 General Industrial IN2 Light Industrial SP2 Infrastructure
Permitted residential typologies	Attached dwellings; Bed and breakfast accommodation; Boarding houses; Dwelling houses; Group homes; Hostels; Multi dwelling housing; Residential flat buildings; Semi-detached dwellings; Seniors housing; Serviced apartments; Shop top housing;
Minimum lot size	700sqm (R1 and R2) 350sqm (areas of R1)
Heritage	A State Heritage Register Curtilage applies to the train station and there are many EPI heritage items along the main street.

Housing Gaps

There is an existing supply of around 40 vacant residential blocks under current zoning within this precinct.

Lack of housing diversity with a dominance of single detached dwellings.

Land Use Opportunities and Constraints

- Sewerage is a key short-term constraint to the expansion of residential use in Marulan, however, Council have upgrades planned so this will not be a constraint in the medium to long term. Reticulated water is supplied from the Wollondilly River.
- Heritage is both a constraint and opportunity, providing character to the main street area and attracting tourists/future residents to the town.
- Flooding is an unquantified constraint in Marulan and it is recommended that a Flood Hazard Study which identifies mainstream and overland flows be completed as soon as practicable. Meanwhile, site specific flood analysis should be undertaken prior to residential development.
- The Hume Highway, Great Southern Railway and haulage routes are both a constraint (noise and physical barrier) and opportunity (well connected and accessible by vehicle or train). Residential use should not be situated immediately adjacent to haulage routes and rail lines. Appropriate noise attenuation measures are recommended for residences in the vicinity.
- Marulan is highly constrained by bushfire risk and factors such as Asset Protection Zones, building materials and evacuation routes need to be carefully considered when extending the residential footprint.
- The recent Marulan Village Centre retail development (including IGA & Liquor) improves shopping options. Infill housing in B2 zone (behind heritage shopfronts) is an opportunity to increase population density within existing village footprint and walking distance to shops and school. 'HASP' reserve (the proposed Marulan Heritage Park) is an opportunity for a district level destination park and liveability attractor for new residents.
- The 2016 Employment Land Strategy recommended to re-zone the area in the vicinity of Austin and Thoroughfare Streets from B6 to R1 to reflect the existing use.

Analysis of Evidence

Marulan provides housing choice in terms of a lower entry point into the housing market compared to Goulburn.

Recent growth has been strong with a 27% increase in population between 2006-2016. If this were to continue, Marulan will require 53 ha of land to provide 450 dwellings to 2036. There is already around 20ha of undeveloped residential land (excluding constrained land to the west).

To accommodate development of a rate up to 25 dwellings per year, an additional 33 ha of land is required (Refer Precinct 3 Marulan North)

Recommendations

- Consider rezoning the industrial land currently occupied by the Truck Stop to urban residential.
- Areas planned for development will require a comprehensive Aboriginal cultural heritage assessment
- Encourage infill development and more efficient lot sizes.
- Higher density residential development could be accommodated in suitable locations within the B2 zone around the town centre of Marulan to encourage housing diversity.

1 - Marulan Town Centre constraints and opportunities



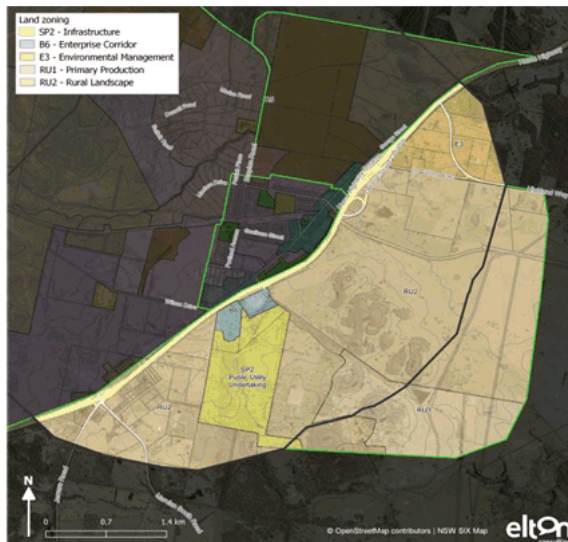
Precinct 2 Marulan South

Locality description

This predominantly rural area is located to the south of the Hume Highway.

The area contains the Marulan Sewerage Treatment Plant and an intensive agricultural industry (Poultry).

Further south is the Boral Peppertree Quarry, and a private railway line runs through the precinct from the Quarry to the Main Southern Railway line.



Character & Planning Controls

Key residential typologies	A few isolated dwellings. B6 zone with highway stop services. Poultry farm sheds
Land use zoning	RU1 Primary Production RU2 Rural Landscape SP2 Infrastructure B6 Enterprise Corridor E3 Environmental Management
Permitted residential typologies	Dwelling houses; Rural workers' dwellings; Secondary dwellings; Tourist and visitor accommodation
Minimum lot size	100Ha over most of precinct 40Ha either side of Jerrara Rd and up to Marulan South Road 5 – 20 ha in the E3 zone
Heritage	A State and Locally listed Conservation Area – General including: - I311 – Old Marulan Anglican Cemetery, Jerrara Rd and Marulan South Rd - I313 – St Patrick's Catholic Cemetery, Hume Highway Also listed in GMLEP: - I314 – "Glenrock" Homestead, Outbuildings, 248 Highland Way Aboriginal sites have been recorded along the western precinct boundary and south eastern corner along Marulan reek. Large numbers of Aboriginal sites have been recorded to the south east as part of quarry activities.

Land Use Opportunities and Constraints

Hume Highway is a natural limit to urban residential growth.
Industrial constraints – sewerage treatment, poultry farm both have buffers.

East-west access south of the railway line is limited with no direct route back to Marulan town.

No effluent management/ irrigation can occur within 100m of a watercourse in the Sydney Drinking Water Catchment (SDWC) which will limit rural residential dwellings in this precinct.

Analysis of Evidence

This area is not suitable for development based on the environmental and other physical constraints.

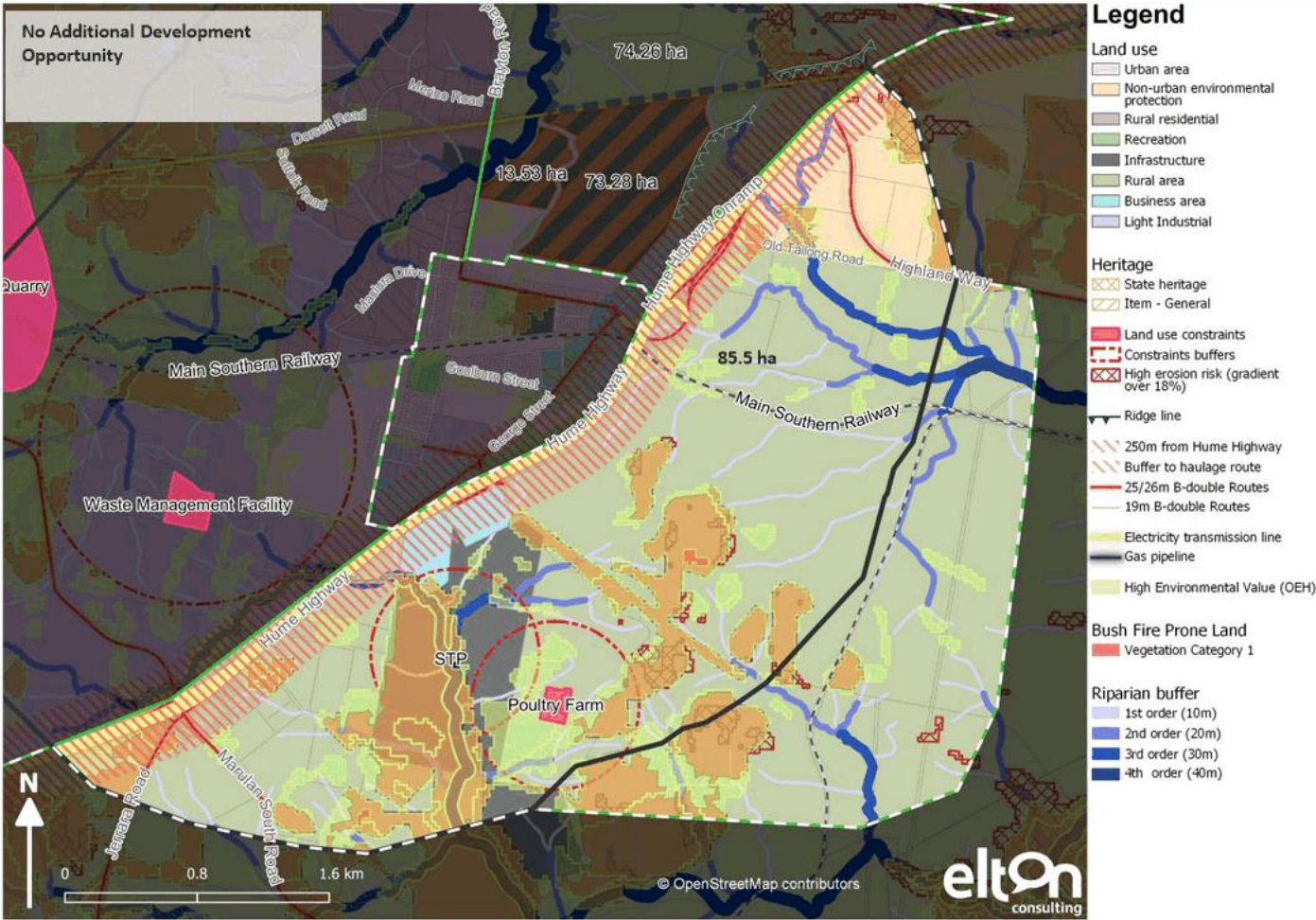
Recommendations

- No rezoning in this precinct
- A LGA-wide Villages Strategy Study is recommended to determine the desired character and degree of separation for each of the LGA's villages.

Housing Gaps

This area does not contribute to the housing supply in Marulan.

2 - Marulan South constraints and opportunities



Precinct 3 Marulan North

Locality description

Marulan North is located immediately north of the Town Centre, and bordered by Hume Highway in the east, Ambrose Road-Red Hills Road to the north and Brayton Road to the west.

The land is predominantly grassed and used for grazing with numerous small dams present. Jaorimin Creek flows north along the west of the precinct into a dam near Gunlake Quarries before continuing north east to join the Wollondilly River. Marulan's water treatment plant is just west of Brayton Road in Marulan West precinct.

There is a steep hill in the north east where Ambrose Road becomes Red Hills Road which extends in a ridgeline south towards the Town Centre. This forms a topographical border to the Hume Highway.



Character & Planning Controls

Key residential typologies	Sparsely distributed farmhouses and ancillary buildings. New suburban urban residential in the south west corner of the precinct (R2).
Land use zoning	R2 Low Density Residential B2 local Centre RU2 Rural Landscape RU6 Transition
Permitted residential typologies	Boarding houses; Dwelling houses; Group homes; Residential care facilities; Residential flat buildings; Rural workers' dwellings; Tourist and visitor accommodation; Shop top housing; Backpackers' accommodation; Bed and breakfast accommodation; Farm stay accommodation.
Minimum lot size	100Ha (RU2 & RU6) 700sqm (R2)
Heritage	Nil.

Housing Gaps

This area does not contribute to the housing supply in Marulan.

Key Issues and opportunities

- Sewerage is a key short term constraint to the expansion of residential use in Marulan, however, Council have upgrades planned so this will not be a constraint in the medium to long term. Reticulated water is supplied from the Wollondilly River.
- Flooding is likely to be a constraint to land adjacent to Jaorimin Creek and the unnamed tributary flowing south to north from the town centre. This area is flat and swampy so both mainstream and overland flow impacts should be investigated prior to residential development. Flooding is already a consideration for the existing zoned land.
- The area near Red Hills Road is steep (slopes over 18 degrees) and highly vegetated. This area is not recommended to be cleared or developed.
- Marulan is highly constrained by bushfire risk and factors such as Asset Protection Zones, building materials and evacuation routes need to be carefully considered when extending the residential footprint.
- The Haulage route along Brayton Road – Ambrose Road – Red Hills road – Hume Highway is heavily used by trucks servicing Gunlake Quarry. Due to the steep slope the trucks generate significant noise and require a 'run up' to reach the top of the hill near Hume Highway. It is not recommended that local residential traffic use this route. Access to residential lots should be from the south, with no direct access to the Ambrose Road – Red Hills Road – Hume Highway route.
- Areas planned for development will require a comprehensive Aboriginal cultural heritage assessment. Large numbers of Aboriginal sites have been recorded in surrounding areas of Marulan as part of quarry activities and previous subdivisions.

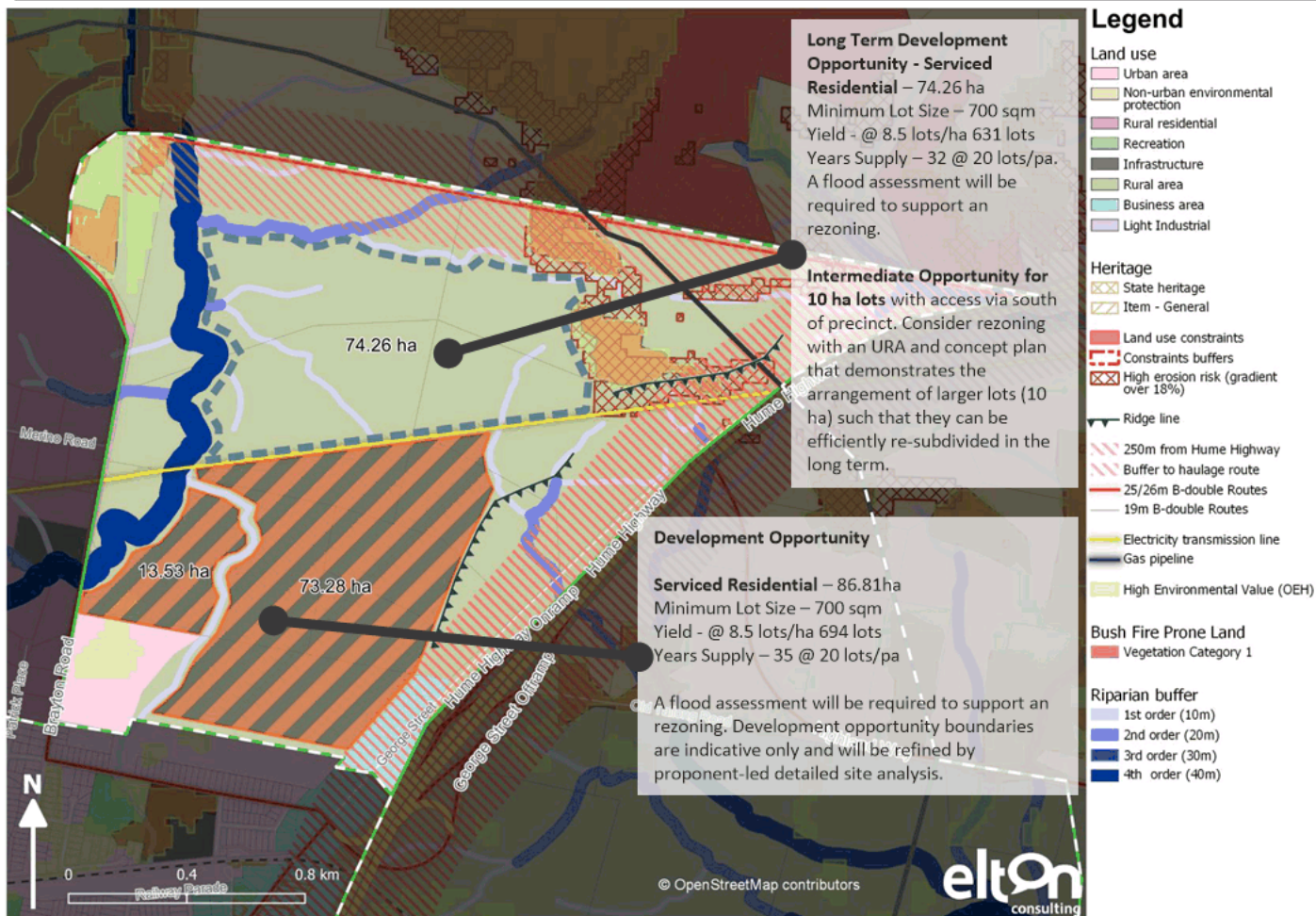
Analysis of Evidence

Marulan North is the only area of land identified in the constraint mapping as suitable for long term growth of the town. There may be opportunities to allow some subdivision to 2ha but only after a concept plan has been developed for the entire area remains critical that the area be retained for urban residential expansion.

Recommendations

- This precinct presents the greatest urban residential capacity for Marulan in the medium to long term and therefore should be protected from fragmentation.
- Rezoning of the Residential area identified in the medium term subject to a comprehensive flood assessment and the inclusion of an Urban Release Area provision and DCP controls.

3 - Marulan North constraints and opportunities

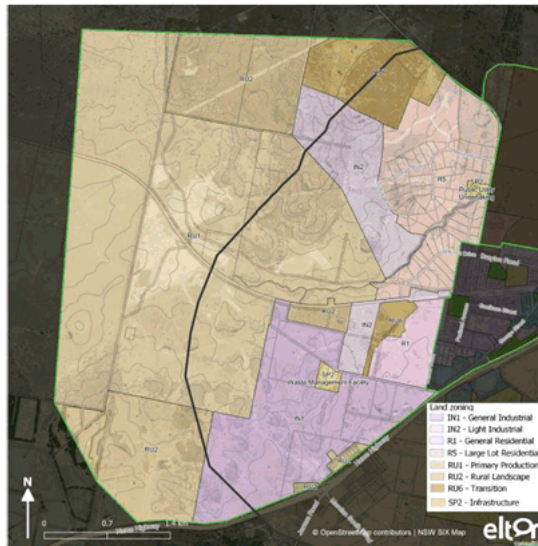


Precinct 4 Marulan West

Locality description

This area is located to the west of the township of Marulan, west of Brayton Road and north of Jerrara Road. The Southern Highlands Railway Line bisects this precinct and the Holcim Lynwood Quarry which forms the western extent of the precinct.

Currently the area contains industrial and infrastructure uses in the south and western portions, forested area in the northern portion with an area of rural residential dwellings just west of Brayton Road.



Recommendations

- There is no additional development capacity in West Marulan due to significant constraints including incompatible land uses.
- Housing in this precinct would sterilize potential resource area/ quarry expansion.

Character & Planning Controls

Key residential typologies	Detached rural-residential (approximately 28 dwellings)
Land use zoning	R1 General Residential R5 Large Lot Residential IN1 General Industrial IN2 Light Industrial SP2 Infrastructure RU1 Primary Production RU2 Rural Landscape RU6 Transition
Permitted residential typologies	Attached dwellings; Bed and breakfast accommodation; Boarding houses; Dwelling houses; Group homes; Home industries; Hostels; Multi dwelling housing; Residential flat buildings; Semi-detached dwellings; Seniors housing; Serviced apartments; Shop top housing;
Minimum lot size	350sqm & 700 sqm (R1) 2000sqm (R5) 100Ha (RU6, RU1 & RU2)
Heritage	A large number of Aboriginal sites have been recorded in this precinct as part of Lynwood Quarry activities.

Housing Gaps

Housing in this precinct is typically large lot residential. Diversity of housing typology and opportunity to increase diversity is limited.

Land use Opportunities and Constraints

- Mining operations and resource opportunity buffers cover most of this precinct.
- A key industry constraint on this precinct is the Hazardous Industry buffer & landfill site in the south west. This buffer impacts on a current DA for residential subdivision.
- Haulage routes with heavy traffic and trains carrying quarried materials and other freight mean that a buffer to residential use is advised to avoid negative impacts on residents. There are also limited access points across the Main Southern Line. Quality of existing local roads for access into the central precinct also poses difficulties.
- Flat areas of lower elevation in the vicinity of Jaorimin Creek may also experience flooding.
- Marulan's water filtration plant is located at the eastern boundary of this precinct, north of the Town Centre.
- Marulan is highly constrained by bushfire risk and factors such as Asset Protection Zones, building materials and evacuation routes need to be carefully considered when extending the residential footprint.
- There are also significant areas of High Environmental Value land through this precinct, as mapped by OEH.
- Opportunity to create the edge of village – some 'transition' housing already with the R5 area – develop up to buffer boundary with a row of larger lot – grazing/hobby farm could extend into the buffer zone.

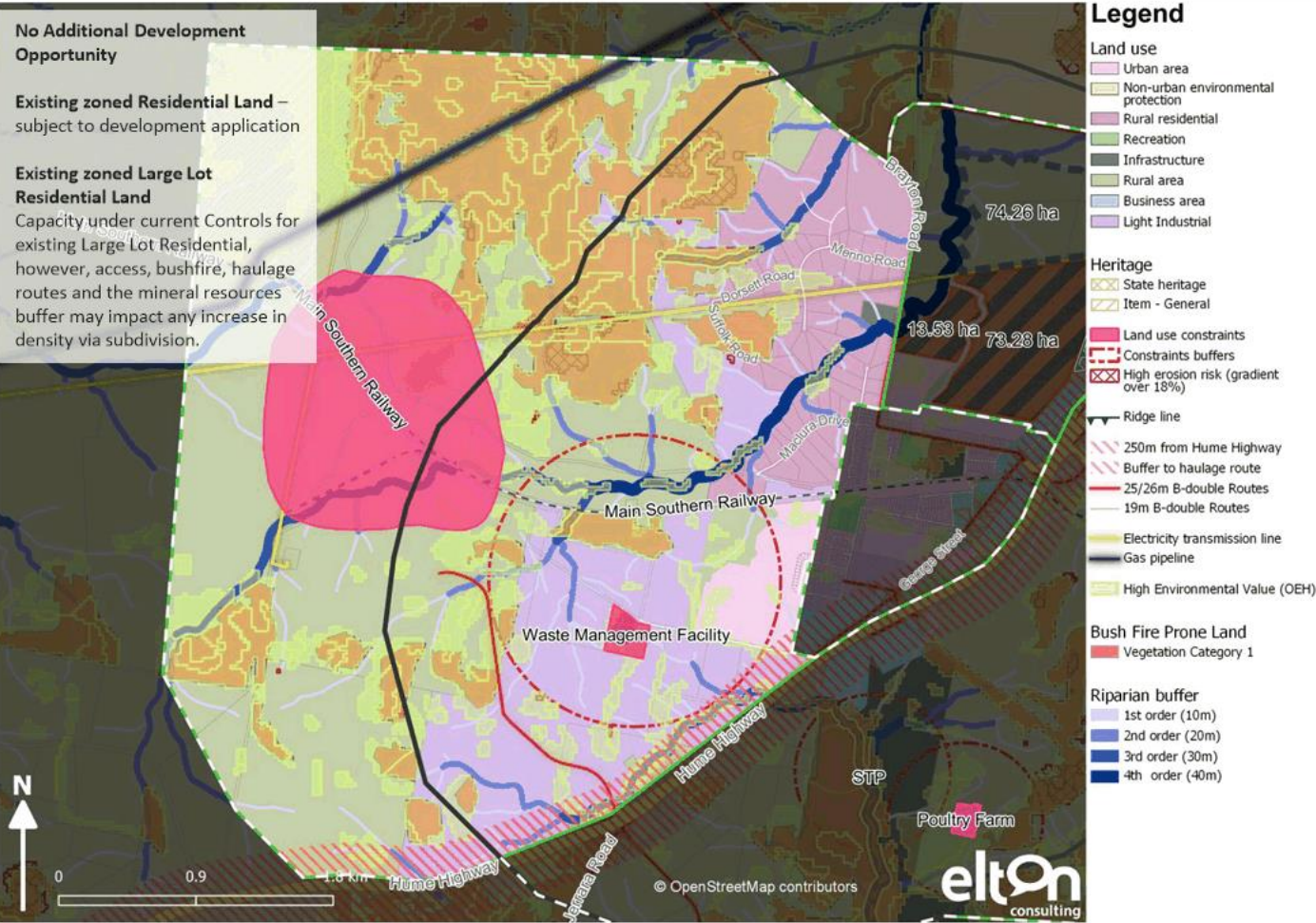
Analysis of Evidence

Marulan West is highly constrained by existing industry and associated buffers.

There is some opportunity for additional residential development (DA currently under assessment by Council).

There are a number of rural residential dwellings already present in this precinct. There is a sufficient area available for housing on larger lots in Marulan generally, however, the densities that have been developed are significantly less than the current minimum lot size allows.

4 - Marulan West constraints and opportunities



Section 4 – The Priorities

4 The Priorities

This section brings together the research and assessment undertaken during the study to provide a set of guiding objectives to inform planning decisions around the delivery of housing in Goulburn and Marulan over the next 18 years and beyond.

4.1 Local housing strategy objectives

The objectives have been formed by the comprehensive analysis of the review of the strategic policy context, demographic analysis, community and stakeholder engagement and analysis of the character, opportunities and challenges for Marulan and Goulburn.

- » provide a surplus of residentially zoned land suitable for timely development to meet current and future needs of the Goulburn Mulwaree LGA to 2036
- » provide a diversity of choice in residential land and dwelling types in a range of appropriate locations responsive to the demographic needs of the Goulburn Mulwaree LGA
- » provide flexibility in zoning and Development Control Plans for high quality urban design outcomes
- » ensure growth occurs in a contiguous and logical manner concentrating on the central areas of settlements for medium density and on the fringe of settlements (within the investigation areas) for rural lifestyle lots
- » future development should strengthen the efficient use of existing infrastructure, services and transport networks and not seek to create unrequired demand for significant new infrastructure
- » manage future development, particularly at the residential/agricultural and the residential/ industrial interfaces to avoid or minimise conflict between land uses
- » provide for development that will complement and reinforce existing and future settlement structure, character and uses and allow for the creation of legible and integrated growth
- » provide and support opportunities for urban intensification through infill and adaptive reuse in the core of Goulburn
- » encourage large lot residential development where opportunity areas are identified in the Marulan Precinct maps
- » ensure sufficient employment land is retained through redevelopment or provided for to allow Goulburn to support commercial enterprise, service provision and employment as the population increases, and reduce escape expenditure
- » residential development should avoid areas of environmental significance, significant natural and/or economic resources, potential hazards, high landscape or cultural heritage value, or potential increased risk associated with impacts of climate change
- » establish clear and logical physical boundaries for the containment of urban development of Goulburn and Marulan, allowing transitional land uses and subdivision patterns which protect highly productive agricultural landscape and areas of significant biodiversity
- » allow for the consideration of rezoning of surplus infrastructure to residential where water and sewer servicing is available subject to consideration of other environmental factors such as potential contamination, flooding and other such constraints.

These objectives provide a clear position and for the evaluation and recommendation of growth in the Goulburn Mulwaree LGA that will deliver sustainable economic, social and environmental outcomes for the community in the supply of housing.

The analysis by precinct in Section 2 highlights the constraints and opportunities for development across the varying character areas in Goulburn and Marulan.

4.2 Land Use Planning Approach

This Strategy adopts an approach to land use planning (below) that is designed to support the delivery of a diverse range of housing in the right locations and to enhance people's ability to access jobs and services, compatible with key identified values that contribute to the character of an area.

It predominantly:

- » concentrates development within the urban fringe that can be readily serviced
- » encourages some local infill through reviewing planning controls.
- » Includes opportunities for large lot residential development

Finalise and endorse the Urban and Fringe Housing Strategy

Planning Proposal

Analysis of planning controls to support the delivery of the Strategy through Planning Proposal/s to deliver Short and Medium Term Development Opportunities. Planning Proposal/s may be Council led or proponent led in consultation with Council depending on the circumstances.

Local Strategic Planning Statement

Overview of land use, direction and character of the LGA to inform LEP and DCP amendments, give weight to the District Plan and Council's Community Strategic Plan.

LEP Amendment, DCP Amendment and Urban Release Area Investigations

- » LEP - areas are identified for potential amendments, informed by principles and constraints analysis development in the Strategy to
 - > Harmonise controls to form a revised LEP including overall aims of the LEP and zone objectives
 - > Review residential and non-residential controls in Goulburn City Centres; controls to activate appropriate housing fronting laneways; encourage shop top housing in City Centre and review FSR and height controls in the City Centre
- » DCP – the DCP provides further guidance for development, and of particular inclusion are character statements; landscaping and design guidance updates. Site specific DCPs should also be prepared to support Urban Release Areas. Once identified as URAs in the LEP these areas should be identified as excluded areas in the current DCP until site specific chapters are added to address Part 6 of the LEP. Site specific DCP chapters are to be supported by a master plan based on technical reports and infrastructure/staging plans.

Local Contributions review to include urban fringe

Based on projected dwellings and population to ensure local infrastructure can occur as and when needed.
Align Local Contribution Plans with Urban Release Areas

Ongoing monitoring

4.3 Key Recommendations

The key recommendations for additional land identified in the Strategy are summarised in the following tables.

4.3.1 Goulburn

Goulburn 2795 or 80 % of the new housing to 2036. This will be in the form of both serviced residential land and large lot residential development.

In addition, it has been assumed that 7% of new dwellings will be in the existing urban area as infill. The recommendation to include a new R3 Medium Density Residential zone may provide additional stimulation for redevelopment in the Goulburn City Centre.

Serviced Residential

Precinct 1 & 2 Run 'O' Waters

The land immediately west of Goulburn has been identified as one of the growth fronts for Goulburn. This area is generally unconstrained and can be readily serviced with minimal upgrades to infrastructure. The existing fragmentation means that the suitability for sustainable agriculture is limited. To realise efficiencies in infrastructure for Council, the proposed minimum lot size is 700 sqm. It is acknowledged that biodiversity constraints and topography may result in a density of less than 8.5 lots per ha despite the minimum lot size.

Precinct 5 & 6 Middle Arm West and East

Predominantly zoned RU6 Transition, this area remains key to the immediate and long-term urban growth of Goulburn. Initial opportunities are for land south of the gas pipeline. Longer term the land north of the pipeline and identified biodiversity constraints has been identified. It remains critical that, despite pressure for large lot residential development throughout this area, it is retained for urban purposes.

The long-term Urban Release Area will need a comprehensive structure plan to ensure that water, sewerage, drainage as well as open space and community infrastructure can be accommodated and delivered in an orderly and coordinated manner.

Precincts 4 Sooley, 7 Kenmore and 16 Bradfordville

Opportunities for serviced residential land have also been identified in the south east corner of Sooley Precinct (RU6 Transition), the west of Kenmore Precinct (SP2 Infrastructure) fronting Taralga Road on the urban fringe, and north west of Bradfordville Precinct (RU6 Transition) adjacent to the existing urban area. The proposed minimum lot size for these areas is 700sqm.

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Table 25 Dwelling Opportunities – Serviced Goulburn

Precinct	Area Identified (ha)	No. Dwellings /lots*	% total new dwellings	Years Supply
Serviced Residential Land				
1/2 Run 'O' Waters	199.13	1,693	44	12.4
4 Sooley	28.38	241	6	1.7
5 Middle Arm West	144.22	1,228	32	9
6 Middle Arm East	26.55	225	6	1.7
16 Bradfordville	13.1	111	3	0.8
7 Kenmore	38.3	326	9	2.4
Sub-Total	456.51	3,824	100	27.9
Urban Release Areas Long Term (beyond 2036)				
3 Baw Baw	110.6	940	27	6.9
5/6 Middle Arm	299.96	2,550	73	18.7
Sub-total	410.46	3,490	100	25.6
Total	869.97	7,368	-	53.7

*Based on single detached dwelling typology

Large Lot Residential

Precincts 2 Run 'O' Waters, 8 Gorman Road, 9 Mt Gray, 10 Mountain Ash and 11 Brisbane Grove

Run 'O' Waters has been flagged for serviced residential, however, there is a small area, currently with a 2ha minimum lot size that could be rezoned to stimulate more efficient use of the land albeit retaining the 2ha lot size. In the longer term, should services become available this area may be able to support 2000-4000sqm lots.

While there are pockets of land that are suitable for large lot residential development throughout the urban fringe, the key areas identified for this form of development are to the east of Goulburn around Gorman Road and Mt Gray, and South of the Hume Highway.

In the case of Gorman Road, the topography and limited potential for high yield, coupled with the distance from reticulated water and sewerage infrastructure impacts the suitability of this area for serviced residential land.

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The Mountain Ash and Brisbane Grove precincts are separated from the urban area of Goulburn by both flooding and the Hume Highway. This will impact any contiguous urban expansion and therefore these areas are not identified as suitable for serviced urban development.

Goulburn Infill

Broad planning controls will continue to provide a range of development opportunities. There are, however, specific areas identified in the centre of Goulburn that could be accommodated in a new R2 Medium Density Residential zone. This would allow a more targeted approach to development for high density housing and could be strengthened through a DCP.

The area proximate (1km) to the CBD of Goulburn offers the most suitable location for renewal and intensification. There is already growing demand in this area for more compact and affordable housing as indicated by the growing approvals.

Analysis of the demographics and housing suggests there is a need for a diversity of housing choices. The area indicated would utilise existing infrastructure, support existing commercial activities and create a walkable and active city centre.

The opportunities for this site area discussed above but will enable specific planning controls and incentives to be adopted to encourage the increase in densities.

Identifying the precinct also provides a starting point for an urban design study to look at the opportunity for increased height in the area and the development of a set of design guidelines to would support this while retaining the integrity of the Heritage Conservation Area and Town Centre.

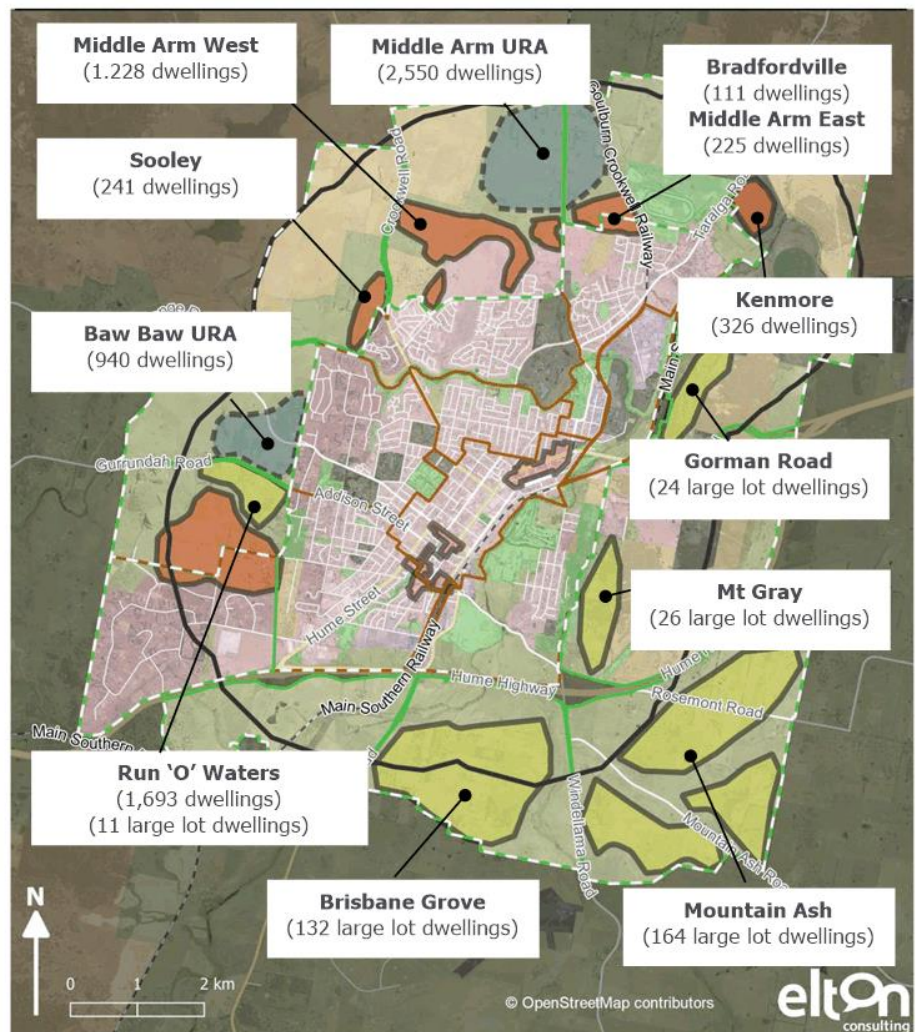
In the absence of urban design guidelines or the identification of specific Key Sites, Council could consider individual proposals on a site by site basis where the proposal is accompanied by a development concept plan and fully considers the impact of the proposal on both the heritage conservation area and the ongoing viability of the Goulburn Town Centre.

Table 26 Dwelling Opportunities Large Lot Residential Goulburn

Precinct	Area Identified (ha)	No. Dwellings /lots^	% total new dwellings	Years Supply
Large Lot Residential				
2 Run 'O' Waters	50.5	11		0.6
8 Gorman Road	86.84	30	9	1.5
9 Mt Gray	72.89	26	7	1.3
10 Mountain Ash	467.45	164	47	8.2
11 Brisbane Grove	376.13	132	38	6.6
Total	1003.31	352	100	17.6

^based on MLS of 2ha. Lots may be larger which will impact yields

Figure 24 Goulburn Development Opportunities



Legend

Urban	G - 1 Run 'O' Waters (existing)	G - 9 Mt Gray	G - 17 Eastgrove
Fringe	G - 2 Run 'O' Waters (rural north)	G - 10 Mountain Ash	G - 18 Central Goulburn
Opportunity area	G - 3 Baw Baw	G - 11 Brisbane Grove	G - 19 Ifield
Serviced Urban Residential	G - 4 Sooley	G - 12 Abattoir	G - 20 Correctional Centre
Large Lot Residential	G - 5 Middle Arm West	G - 13 Garfield	
Urban Release Area Long Term	G - 6 Middle Arm East	G - 14 West Victoria Park	
Existing Residential Zone	G - 7 Kenmore	G - 15 Marys Mount	
	G - 8 Gorman Rd	G - 16 Bradfordville	

4.3.2 Marulan

Serviced Residential

There are constraints in every direction but north which limit the capacity for growth in Marulan. Like Goulburn, it is imperative that land that is suitable for serviced residential development is preserved for that purpose. In the interim, therefore subdivision in the RU6 Transition zone should be limited to a minimum lot size of 10ha in the northern precinct (M 3) until potentially required for urban residential development. This area has been identified for rezoning in the medium term.

Large Lot Residential

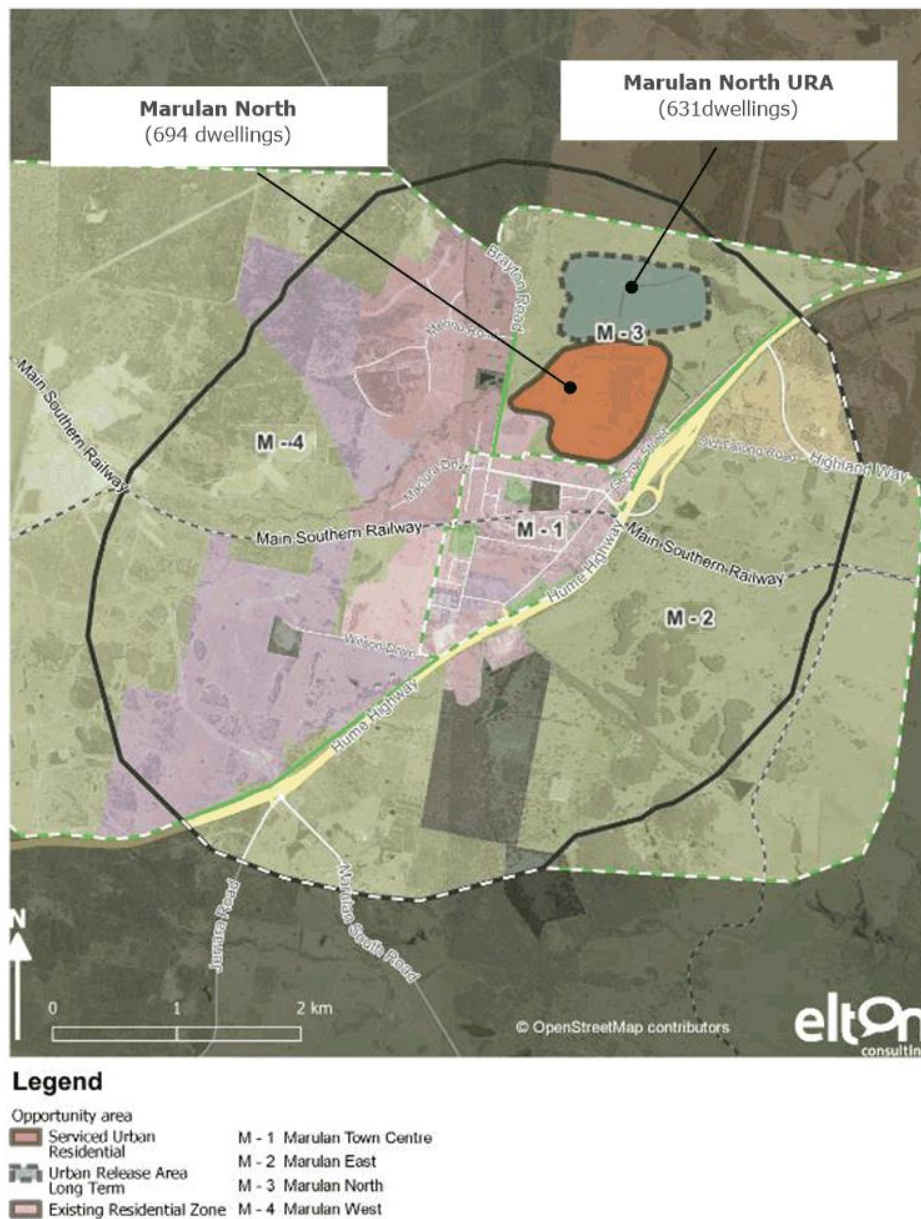
Constraints once again result in difficulties in identifying land for large lot residential that retains continuity with the existing town. Marulan East (Marulan South during the second exhibition) is no longer identified for large lot residential development due to constraints and concerns raised in the submissions.

Table 27 Additional Land Requirements Marulan

Marulan	Area Identified (ha)	No. Dwellings /lots*	% total new dwellings	Years Supply
Serviced Residential				
3 Marulan North	86.81	694	96	35
Consider staged approach, rezone with an Urban Release Area and Concept Plan to deliver 2ha lots in the short term and re-subdivide in the future				
Sub-Total	86.81	694	96	35
Urban Release Areas Long Term (beyond 2036)				
3 Marulan North	74.26	631	100	32

*For the purpose of years of supply, it is assumed to be included in the overall 25 lots per annum, no distinction between residential and large lot residential

Figure 25 Marulan Development Opportunities



4.4 Mechanisms to Deliver the Options

In Goulburn, the priority is to secure the next release of greenfield land for residential development whilst ensuring that local planning controls and development opportunities are sufficiently flexible to ensure the ongoing delivery of a diverse range of dwelling typologies to provide for growth.

The opportunity to introduce changes to the application of certain land use zones and permissible uses in the GMLEP are also available.

Planning Proposal

The key actions for land use zoning as identified in the Strategy will require changes to be made to the GMLEP. The mechanism for amending the GMLEP is through a Planning Proposal. A Planning Proposal is the document that explains the intended effect of a Local Environmental Plan and sets out the justification for making the plan.

A Planning Proposal is prepared by either a proponent or Council to affect changes in the control in the Local Environmental Plan. The GMLEP can only be amended by a Planning Proposal.

DPE have prepared guidelines under section 3.33 of the EP&A Act to assist in the preparation of Planning Proposals.

4.4.1 Local Environmental Plan

Local Environmental Plans guide planning decisions for local government areas. They do this through zoning and development controls, which provide a framework for the way land can be used. LEPs are the main planning tool to shape the future of communities and also ensure local development is done appropriately.

There are a number of local provisions that can be applied through the GMLEP to achieve the intended outcomes of the Strategy. These include specifying minimum lot sizes for particular zones and in certain areas, land use tables that provide a clear indication of the permissible and prohibited land uses, essential services and other local provisions.

The GMLEP already includes provisions in Part 6 for urban release areas. The objective of the urban release area (URA) part of the GMLEP is to ensure that the development of land occurs in a logical and cost-effective manner and in accordance with a staging plan and DCP. The URA applies to land that is "up-zoned" as part of an LEP review process. The continued operation of these provisions is essential for the orderly development of land identified under the Strategy.

Planning Proposal

The Strategy will require changes to the GMLEP and DCP in order that it be implemented to the extent that land is rezoned to accommodate additional residential growth in the short to medium term. Land identified under the Strategy for future urban purposes will need to go through this process.

In most instances the Planning Proposal will be put forward by a landowner or proponent and may require additional technical investigations at a site specific level to support the anticipated outcome. While the Planning Proposal will be initiated by the landowner, where the proposal is consistent with the Strategy and supported by Council, Council will commit to working with the landowners to facilitate the rezoning through the process.

Alternatively, there may be circumstances where Council takes the lead on the Planning Proposal and a landowner, or group of landowners contribute to the funding for individual technical studies that may be required under a Gateway Determination once the proposal has the support of DPIE.

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Planning Proposals will consolidate the constraints analysis and further refine the indicative opportunity areas to identify land suitable and endorsed for development.. Planning Proposals will need to provide a detailed infrastructure and servicing assessment based on estimated yields and relative to specific areas which will be used to inform a master plan and site specific development control plan DCP) provisions. Traffic and access will also be key considerations.

Land that is up-zoned to residential development falls within the Urban Release Area provisions of the Standard Instrument LEP and a DCP is required to be prepared prior to the subdivision of land in an Urban Release Area. The provisions have been put in place to ensure the orderly development of land as follows (extract from GMLEP).

6.2A Development control plan

- (1) The objective of this clause is to ensure that development on land in an urban release area occurs in a logical and cost-effective manner, in accordance with a staging plan and only after a development control plan that includes specific controls has been prepared for the land*
- (2) Development consent must not be granted for development on land in an urban release area unless a development control plan that provides for the matters specified in subclause (3) has been prepared for the land*
- (3) The development control plan must provide for all of the following:*
 - (a) a staging plan for the timely and efficient release of urban land, making provision for necessary infrastructure and sequencing,*
 - (b) an overall transport movement hierarchy showing the major circulation routes and connections to achieve a simple and safe movement system for private vehicles, public transport, pedestrians and cyclists,*
 - (c) an overall landscaping strategy for the protection and enhancement of riparian areas and remnant vegetation, including visually prominent locations, and detailed landscaping requirements for both the public and private domain,*
 - (d) a network of active and passive recreation areas,*
 - (e) stormwater and water quality management controls,*
 - (f) amelioration of natural and environmental hazards, including bush fire, flooding and site contamination and, in relation to natural hazards, the safe occupation of, and the evacuation from, any land so affected,*
 - (g) detailed urban design controls for significant development sites,*
 - (h) measures to encourage higher density living around transport, open space and service nodes,*
 - (i) measures to accommodate and control appropriate neighbourhood commercial and retail uses,*
 - (j) suitably located public facilities and services, including provision for appropriate traffic management facilities and parking.*

Further details as to the requirements for the Planning Proposal will need to be discussed with DPIE and relevant State agencies, however, given the investment in infrastructure required, Planning Proposals will generally be supported to re-zone sufficient land for a minimum of 10 years supply.

Process for Rezoning

A Planning Proposal could be prepared on a site by site basis, or a number of landowners may get together to prepare a proposal for a consolidated site. The process itself is outlined in the

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Guideline for the Preparation of Planning Proposals published by the NSW Government. The process involves:

Preparation of a Planning Proposal consistent with the Guideline and the recommendations of the Strategy

Assessment of the initial proposal by Council Staff

Report to Council. If Council support the proposal it is forwarded to the Department of DPIE for their assessment.

Gateway Determination. If supported by DPIE a Gateway Determination is issued. This generally includes conditions and may require the preparation of additional technical information, requirements for consultation with State Government agencies and Public Exhibition requirements.

Public Exhibition of the Planning Proposal can commence only after any Gateway conditions have been met and will generally be a minimum of 28 days.

Following the exhibition period, submissions are reviewed and, in some circumstances, changes may be made to the proposal.

Once finalised, the Planning Proposal is reported by to Council for finalisation. Following endorsement from Council, the proposal is then submitted to the Minister (or delegate) to be made. The rezoning becomes effective once the amendment to the GMLEP has been published on the legislation website.

Concept Development Applications

A concept development application allows for the development of a high level concept plan for a large site and then for the individual, more detailed subdivision applications for the release of land, to be delivered in Stages. A concept development application is a useful mechanism for the delivery of land in circumstances where a full detailed development control plan (DCP) has not been prepared or a landowner is seeking certainty in terms of a longer term development project.

4.4.2 Development Control Plan

In addition to an amendment to the GMLEP, Council can consider arrange of other mechanisms to enhance, encourage and promote the objective of the Strategy and the delivery of a range of housing including a Development Control Plan (DCP).

Whilst land is under the provisions of Part 6- URA controls of the LEP the current DCP may require amendment to exclude these areas until a site specific chapter with structure plan, and developer contribution plan are developed to facilitate orderly release.

Urban Release Areas will require site specific DCP provisions based upon a Council endorsed Master Plan and Infrastructure/Staging Plan prepared to satisfy the requirements of Clause 6.2A of GMLEP 2009. The Master Plan and Infrastructure/Staging Plan is to be informed by:

- Site constraints and opportunities
- Site specific technical investigations; and
- Consultation with Council's staff and State agencies where appropriate
- The availability of hard infrastructure (roads, reticulated water and sewer services) so as to maximise on the extent and location.

Master plans are to include details such as infrastructure, indicative roads, residential areas, open space, reservations of biodiversity significant land/natural areas, flood affected areas, etc as applicable to the site.

4.4.3 Adaptable Housing Policy

One of the key findings in term of existing housing is the lack of diversity in terms of typology. Coupled with and aging population and change to household structure, 3-4 bedroom single detached dwellings are unlikely to be the most suitable option. In response to the changing demographic and principle of aging in place, Council could consider the introduction of adaptable residential accommodation guidelines in the DCP or local policy.

Adaptable accommodation is a dwelling that is able to respond effectively to these needs without requiring costly and energy intensive alterations. Council could work with local developers and builders to address element like bathroom size, corridor width and the general accessibility of the products currently being delivered. Development controls such as minimum targets for adaptable housing in in multi-dwelling housing development could be introduced. This could encourage older people to relocate to smaller dwellings and age in place.

Seniors Housing and Housing for People with a Disability

The Seniors Housing SEPP does not apply to the Sydney Drinking Water Catchment; however, Council could consider whether elements of the policy could be adopted in the DCP.

Seniors housing is residential accommodation that is, or is intended to be, used permanently for seniors or people with a disability consisting of:

- (a) a residential care facility, or
- (b) a hostel, or
- (c) a group of self-contained dwellings, or
- (d) a combination of these.

but does not include a hospital.

The application of specific provisions in the DCP could be a starting point for Council as a mechanism to deliver a housing product that is better suited to older people.

Affordable Housing

Affordable Housing Policies are a mechanism for the delivery of smaller lot housing in particular areas or circumstances.

The evidence suggests that are a number of areas of disadvantage. Considering the development of a local housing affordability policy should provide the starting point for addressing affordability.

4.5 Monitoring and Review

Council will continue to monitor the release of land and dwelling approvals to track the actual delivery of housing against the projected demand.

The following monitoring and review will be adopted:

- » annual review against the anticipated demand with particular focus on number and location of higher density housing and the implementation outcomes identified above
- » five yearly reviews of the evidence base, demographic profiles and housing stock against the broader aims of the Regional Plan

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» a ten year review to ensure that the vision, evidence base and strategic planning context are aligned with the goals of the community, Regional Plan and implementation outcomes.

Section 5 - Actions

5 Actions

Notes: The Overarching Policy Directions Correspond to the relevant Directions of the South East and Tablelands Regional Plan (eg. SETRP Direction 24) and the reference is made after the direction is cited. This has been done to provide direct correlation between the SETRP and the Strategy.

The **Strategy** is overarching and it has a corresponding **Action** or series of Actions

Implementation Outcomes provides a simply measure of the success in delivery of the Action

Timeframe is in Short term 12 months, Medium 5 -10 years, Long 10 years plus. Timeframes may vary as priorities change in response to growth

Responsibility, predominately Council but some Actions require collaboration

Direction A Deliver greater housing supply and choice (SETRP Direction 24)

Strategy	Action	Implementation Outcome	Timeframe	Responsibility
A1 Housing Strategy is prepared having regard to the Draft guideline for the preparation of housing strategies and the Settlement Planning Principles	A1-1 Complete and endorse the Local Housing Strategy	Strategy adopted	Short	Council/DPIE
A2 Provide for a range of housing typologies to suit the demands of the changing demographic of the current population and the incoming population.	A2-1 Review the GMLEP Land use tables for the R1 General Residential and R2 Low Density Residential zones to reflect the expectation of residents and different zone objectives.	Strategy Adopted by Council and DPIE Planning controls provide for housing choice. Community have more certainty as to the likelihood of the type of development in their street Amendment to the GMLEP made	Short Medium	Council/DPIE

Strategy	Action	Implementation Outcome	Timeframe	Responsibility
A3 Ensure that planning controls provide opportunity for housing for older people.	A3-1 Amend the DCP to include controls for adaptable housing in the R1, R2 and R3 zones.	DCP revised and commenced	Medium	Council
A4 Provide opportunities for increase in densities closer to the town centre of Goulburn	A4-1 Consider an amendment to the GMLEP to provide for additional R3 Medium Density zone in the Central Goulburn Character Area	An increase in the number of infill development, including multi dwelling housing within 400m of the City Centre	Medium	Council
	A4-2 Review local provisions to encourage multi dwelling housing closer to the Goulburn CBD (refer also B6)		Short	Landowner/ Council
				Council

Direction B Focus housing growth in locations that maximise infrastructure and services (SETRP Direction 25)

Strategy	Action	Implementation Outcome	Timeframe	Responsibility
B1 Provide suitable Urban Release Areas that can be readily serviced and infrastructure accommodated into a local contributions plan as part of the planning process for the Structure Plan	B 1-1 Strategy identifies areas that are suitable for rezoning for residential development B1-2 Recognises the need to extend the urban footprint into areas that are readily accessible and can be connected to existing infrastructure	A development footprint that demonstrated sequential release of land	Short	Council/Community/Landowners
B2 Ensure Social and Community Infrastructure is available to meet the needs of the incoming population	B2-1 Review Community and Recreation Plans and Strategies to support the delivery of infrastructure to new development B2-2 Review the Local Contributions Plan	Local Infrastructure delivered by the developer and apportioned to new development with no cost to the community. Plan complete and updated	Short	Council
B3 Maximise the utilization of hard Infrastructure (water and Sewer)	B3-1 Ensure that DSPs are up to date B3-2 Provide flexibility in the planning controls to encourage infill development in suitable locations B3-3 Review Council's planning resources and update/create information sheets or on-line resources to assist mum and dad developers understand the controls	Up to date DSPs Increase in infill development Local Contribution Plan reflects additional demand and local infrastructure delivery	Medium	Council
B4 Encourage residential development around Marulan to promote growth	B4-1 Prepare a Planning Proposal to provide additional opportunities for low density residential development at Marulan consistent with the Strategy	Structure planning of opportunity areas to facilitate sequential residential	Medium	Council/Landowners

Strategy	Action	Implementation Outcome	Timeframe	Responsibility
		development in the medium term		
B5 Avoid and Manage Land Use Conflict	<p>B5-1 Consider adjoining land uses, including agricultural land as part of the assessment criteria for urban expansion.</p> <p>B5 -2 Adopt the development principles that can be applied to future unsolicited Planning Proposals as part of the adoption of the strategy</p>	Rezoning of occurs only where consistent with planning principles	On-Going	Council/ Landowners
B6 Support additional residential opportunities in the Goulburn CBD	<p>B5-1 Consider rezoning land and/or reviewing land use tables to encourage residential development in the city centre</p> <p>B5-2 Include controls in the DCP that continue to preserve commercial and retail land uses and activation at ground floor level along Auburn Street</p> <p>B5-3 Review controls in the DCP to provide incentives for certain residential uses, for example reduction in car parking in certain circumstances or locations.</p>	Additional housing opportunities and density in the CBD	Short	Council

Direction C: Deliver more opportunities for affordable housing SETRP Direction 27)

Strategy	Action	Implementation Outcome	Timeframe	Responsibility
C1 Facilitate affordable housing	<p>C1-1 Retain planning controls in the LEP that allow a range of residential accommodation across some residential zones.</p> <p>C1-2 Prepare an affordable housing strategy</p> <p>C1-3 Investigate the incorporation of affordable housing targets in new release areas</p> <p>C1-4 Ensure development is readily able to be connected to services and devoid of high value biodiversity thereby reducing the cost of development.</p> <p>C1-5 Retain planning controls that encourage the delivery of one and two bedroom dwellings</p>	<p>Ready supply of land to the market to meet demand.</p> <p>A range of housing types available.</p> <p>Reduction in wait times for rental accommodation.</p>	Medium	Council

Direction D: Build socially inclusive, safe and healthy communities (SETRP Direction 22)

Strategy	Action	Implementation Outcome	Timeframe	Responsibility
D1 Deliver well planned suburbs and communities	<p>D1-1 Include Neighbourhood Planning Principles in the consideration of the future development of Urban Release Areas under the Planning Proposal</p> <p>D1-2 Consider connectivity in preparing Neighbourhood Structure Plans/Master Plans and development concept plans for Urban Release Areas</p>	<p>Urban Release Areas identified with corresponding guidelines to facilitate development in the short term.</p>	On-Going	Council/ Developer/ Landowner

Strategy	Action	Implementation Outcome	Timeframe	Responsibility
D2 Support adaptable housing	D2-1 Include Liveable Housing controls into DCPs that support Urban Release Areas D2-2 Amend the DCP to include adaptable and liveable housing	DCP amended to reflect adaptable and liveable housing	Medium	Council
D3 Promote Sustainable Communities	D3-1 Support sustainability principles in the DCP D3-2 Include energy efficiency and sustainable design principles into DCPs	DCP amended to reflect sustainability principles	Medium	Council

Direction E: Manage rural lifestyles (SETRP Direction 28)

Strategy	Action	Implementation Outcome	Timeframe	Responsibility
E1 Support the strategic location of lifestyle development	E1-1 Development of criteria for rezoning applications including a set of development principles that can be applied to future unsolicited Planning Proposals.	Criteria adopted and being applied	Short	Council

Direction F: Protect important agricultural land (SETRP Direction 8)

Strategy	Action	Implementation Outcome	Timeframe	Responsibility
F1 Support Important Agricultural Land Mapping	F 1-1 Work with Department of Primary Industry to support the preparation of important agricultural land mapping for the South East and Tablelands Regional Plan area.	Future urban land excludes, where practical, important agricultural land The Planning Proposal for urban land considers important agricultural land mapping	Medium	Council/ DPI Ag
F2 Manage incompatible land use activities on the urban fringe	F1-1 Consider the implementation of buffers; natural and built to protect productive agricultural land from the impact of urban development F-2 Reduce fragmentation for rural land by retaining suitable MLS and the Transition Zone	Potential revision of DCP controls for buffers to certain development from/to residential development. Criteria adopted in Strategy to avoid identifying residential in proximity to avoid interface areas. No planning proposals reducing MLS outside	On-Going	Council/ Landowners/ Developers

Strategy	Action	Implementation Outcome	Timeframe	Responsibility
		opportunity area identified in the Strategy.		

Direction G Manage the ongoing use of mineral resources (SETRP Direction 13)

Strategy	Action	Implementation Outcome	Timeframe	Responsibility
G1 Protect valuable mineral resources	G1-1 Consultation with NSW Division of Resources and Geosciences during exhibition of Strategy G1-2 Manage land use conflict around Marulan by reducing the number residential lots that potentially encroach on extractive operations	Consultation completed. Future urban land does not encroach on existing mineral resources. Site specific DCP provisions to be prepared to avoid conflict between residential development and extractive industries.	Short and ongoing	Council/Dept. Industry
G2 Avoid identification of additional urban land adjacent to extractive industries around Marulan	G2-1 Identify extractive industries in planning documentation and ensure that urban expansion into these areas in minimised	Important mineral resources protected	On-going	Council/Dept Industry

Direction H: Protect important environmental assets and Enhance biodiversity connections (SETRP Directions 14 & 15)

Strategy	Action	Implementation Outcome	Timeframe	Responsibility
H1 Protect Biodiversity	H1-2 Identification of land with high biodiversity value in the Strategy study area verified by EcoLogical for the Planning Proposal. Where such land cannot be avoided, development will be minimised and or offset.	Future urban land excludes land with high environmental value. Biodiversity corridors avoided	Short	Council /LLS/OEH

Strategy	Action	Implementation Outcome	Timeframe	Responsibility
	H1-1 Urban development will avoid identified biodiversity corridors			

Direction I: Secure water resources (SETRP Direction 18)

Strategy	Action	Implementation Outcome	Timeframe	Responsibility
I1 Protect the Sydney Drinking Water Catchment	<p>I1-1 Consider the impact of urban development on the Sydney Drinking Water Catchment in the Planning Proposal.</p> <p>I1-2 Review water cycle management strategies to include the additional urban areas identified in the Strategy as part of the Planning Proposal process.</p> <p>Include WSUD in corresponding Development Controls Plans for Urban release areas</p>	<p>No adverse impact on the water catchment. All development in the SWC must have a neutral or beneficial effect on water quality</p> <p>Water cycle management strategies area up to date</p> <p>WSUD principles applied to all new development</p>	On-going	Council/Water NSW

Direction J: Protect the Regions Heritage (SETRP Direction 23)

Strategy	Action	Implementation Outcome	Timeframe	Responsibility
J1 Undertake and implement heritage studies to inform local strategies.	<p>J1-1Consult with Aboriginal people during the exhibition of the Strategy</p> <p>J1-1Undertake detailed Aboriginal Cultural Heritage Assessment to inform</p>	Sites identified/impact mitigated	Short	Council/ developers/ Aboriginal Groups

Strategy	Action	Implementation Outcome	Timeframe	Responsibility
	the Planning Proposal prior to public exhibition.			
J2 Protect and Conserve Significant European Heritage	J2-1 Consider the opportunities for adaptive re-use of Heritage Buildings, particularly in relation to providing incentives for redevelopment within the Goulburn Town Centre for higher density development	Increase in the number of adaptations of heritage item leading the restoration and use	On-going	Council/ Landowners

Monitoring and Review

Council will continue to monitor the release of land and dwelling approvals to track the actual delivery of housing against the projected demand.

The following monitoring and review will be adopted:

- » annual review against the anticipated demand with particular focus on number and location of higher density housing and the implementation outcomes identified above
- » five yearly reviews of the evidence base, demographic profiles and housing stock against the broader aims of the Regional Plan
- » a ten year review to ensure that the vision, evidence base and strategic planning context are aligned with the goals of the community, Regional Plan and implementation outcomes.

Appendices

A Ministerial Directions

Draft Urban and Fringe Housing Strategy

1 Ministerial Directions

Section 9.1 of the *Environmental Planning and Assessment Act 1979* (EP&A Act) provides that any direction of the Minister is to be taken into account in the preparation of a planning proposal. As the Strategy will make recommendations to inform a Planning Proposal to rezone land for urban development, the Strategy has been prepared having regard to the relevant Directions.

Employment and resources

Direction 1.1 Business and Industrial Zones

The objectives of this direction are to:

- » encourage employment growth in suitable locations,
- » protect employment land in business and industrial zones, and
- » support the viability of identified centres.

This direction applies when a relevant planning authority prepares a planning proposal that will affect land within an existing or proposed business or industrial zone (including the alteration of any existing business or industrial zone boundary).

Rezoning of employment land will need to be justified by a strategy that considered the objectives of the direction.

Direction 1.2 Rural zones

The objective of the direction is to protect the agricultural production value of rural land. It applies when a planning authority prepares a planning proposal that will affect land within an existing or proposed rural zone.

The direction requires the planning authority to:

- » not rezone land from a rural zone to a residential, business, industrial, village or tourist zone

A planning proposal may be inconsistent with the terms of this direction only if the relevant planning authority can satisfy the Director-General of the Department of Planning (or an officer of the Department nominated by the Director-General) that the provisions of the planning proposal that are inconsistent are:

- a. justified by a strategy which:
 - i. gives consideration to the objectives of this direction,
 - ii. identifies the land which is the subject of the planning proposal (if the planning proposal relates to a particular site or sites), and
 - iii. is approved by the Director-General of the Department of Planning, or
- b. justified by a study prepared in support of the planning proposal which gives consideration to the objectives of this direction, or
- c. in accordance with the relevant Regional Strategy, Regional Plan or Sub-Regional Strategy prepared by the Department of Planning which gives consideration to the objective of this direction, or
- d. is of minor significance.

Direction 1.3 Mining, petroleum production and extractive industries

The objective of this direction is to ensure that the future extraction of State or regionally significant reserves of coal, other minerals, petroleum and extractive materials are not compromised by inappropriate development.

This direction applies to all relevant planning authorities.

This direction applies when a relevant planning authority prepares a planning proposal that would have the effect of:

- » prohibiting the mining of coal or other minerals, production of petroleum, or winning or obtaining of extractive materials
- » restricting the potential development of resources of coal, other minerals, petroleum or extractive materials which are of State or regional significance by permitting a land use that is likely to be incompatible with such development.

Direction 1.5 Rural lands

The objectives of this direction are to protect the agricultural production value of rural land and facilitate the orderly and economic development of rural lands for rural and related purposes.

It applies when a planning authority prepares a planning proposal that will affect land within an existing or proposed rural or environment protection zone or that changes the minimum lots size on land within a rural or environment protection zone.

This direction requires the planning proposal to a range of factors including the key environmental constraints, support investment in agriculture and farmers right to farm and 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.

Environment and heritage**Direction 2.3 Heritage conservation**

The objective of this direction is to conserve items, areas, objects and places of environmental heritage significance and indigenous heritage significance.

It applies when a planning authority prepares a planning proposal which must contain provisions that facilitate the conservation of:

- » Items, places, buildings, works, relics, moveable objects or precincts of environmental heritage significance to an area, in relation to the historical, scientific, cultural, social, archaeological, architectural, natural or aesthetic value of the item, area, object or place, identified in a study of the environmental heritage of the area
- » Aboriginal objects or Aboriginal places that are protected under the *National Parks and Wildlife Act 1974*
- » Aboriginal areas, Aboriginal objects, Aboriginal places or landscapes identified by an Aboriginal heritage survey prepared by or on behalf of an Aboriginal Land Council, Aboriginal body or public authority and provided to the relevant planning authority, which identifies the area, object, place or landscape as being of heritage significance to Aboriginal culture and people.

Housing, infrastructure and urban development**Direction 3.1 Residential zones**

The objectives of this direction are:

- » to encourage a variety and choice of housing types to provide for existing and future housing needs
- » to make efficient use of existing infrastructure and services and ensure that new housing has appropriate access to infrastructure and services
- » to minimise the impact of residential development on the environment and resource lands.

It applies when a planning authority prepares a planning proposal that will affect land within an existing or proposed residential zone or any other zone in which significant residential development is permitted or proposed to be permitted.

This direction requires the planning proposal to:

- » include provisions that encourage the provision of housing that will:
 - > broaden the choice of building types and locations available in the housing market
 - > make more efficient use of existing infrastructure and services
 - > reduce the consumption of land for housing and associated urban development on the urban fringe
 - > be of good design.
- » in relation to land to which this direction applies:
 - > contain a requirement that residential development is not permitted until land is adequately serviced (or arrangements satisfactory to the council, or other appropriate authority, have been made to service it)
 - > not contain provisions which will reduce the permissible residential density of land.

Direction 3.4 Integrating Land Use and Transport

This direction applies when a relevant planning authority prepares a planning proposal that will create, alter or remove a zone or a provision relating to urban land, including land zoned for residential, business, industrial, village or tourist purposes.

Direction 3.6 Shooting Ranges

This direction applies when a relevant planning authority prepares a planning proposal that will affect, create, alter or remove a zone or a provision relating to land adjacent to and/ or adjoining an existing shooting range.

Hazard and risk

Direction 4.3 Flood prone land

The objectives of this direction are:

- » to ensure that development of flood prone land is consistent with the NSW Government's Flood Prone Land Policy and the principles of the Floodplain Development Manual 2005
- » to ensure that the provisions of an LEP on flood prone land is commensurate with flood hazard and includes consideration of the potential flood impacts both on and off the subject land.

This direction applies to all relevant planning authorities that are responsible for flood prone land within their Shire. This direction applies when a relevant planning authority prepares a planning proposal that creates, removes or alters a zone or a provision that affects flood prone land.

Direction 4.4 Planning for bushfire protection

The objectives of this direction are:

- » to protect life, property and the environment from bush fire hazards, by discouraging the establishment of incompatible land uses in bush fire prone areas
- » to encourage sound management of bush fire prone areas.

This direction applies to all Shires in which the responsible Council is required to prepare a bush fire prone land map, or, until such a map has been certified by the Commissioner of the NSW Rural Fire Service, a map referred to in Schedule 6 of that Act.

This direction applies when a relevant planning authority prepares a planning proposal that will affect, or is in proximity to land mapped as bushfire prone land.

Regional Planning**Direction 5.1 Implementation of Regional Strategies**

Amended in May 2017 to include former Direction 5.6 Sydney to Canberra Corridor (Revoked 10 July 2008). This direction applies to land to which the following regional strategies apply: (a) South Coast Regional Strategy (excluding land in the Shoalhaven LGA) and (b) Sydney–Canberra Corridor Regional Strategy.

Planning proposals must be consistent with the Regional Strategy unless the relevant planning authority can satisfy DPE that the extent of inconsistency: is of minor significance, and the planning proposal achieves the overall intent of the regional strategy and does not undermine the achievement of its vision, land use strategy, policies, outcomes or actions.

Direction 5.2 Sydney Drinking Water Catchments

The objective of this Direction is to protect water quality in the Sydney drinking water catchment. This Direction relates to SEPP (SDWC) 2011 and applies when a relevant planning authority prepares a planning proposal that applies to land within the Sydney drinking water catchment. Any PP must also be consistent with SEPP (SDWC) 2011.

Specific principles of Direction 5.2 are:

- a. new development within the Sydney drinking water catchment must have a neutral or beneficial effect on water quality, and
- b. future land use in the Sydney drinking water catchment should be matched to land and water capability, and
- c. the ecological values of land within a Special Area that is:
 - i. reserved as national park, nature reserve or state conservation area under the National Parks and Wildlife Act 1974, or
 - ii. declared as a wilderness area under the Wilderness Act 1987, or
 - iii. owned or under the care control and management of the Sydney Catchment Authority, should be maintained

Direction 5.10 Implementation of Regional Plans

The objective of this direction is to give legal effect to the vision, land use strategy, goals, directions and actions contained in Regional Plans. It applies when a planning authority prepares a planning proposal, which must be consistent with the Regional Plan – in this case, the South East and Tablelands Regional Plan.

2 State Environmental Planning Policies

A number of State Environmental Planning Policies (SEPPs) need to be considered in the context of delivering housing. Generally, these policies will form part of the statutory consideration of specific development applications.

Exempt and Complying Development Codes SEPP

The State Policy for exempt and complying development is contained within the State Environmental Planning Policy (Exempt and Complying Development Codes) 2008 (the State Policy). Exempt development means low impact works not requiring a full merit assessment by council. Complying development is development that meets all of the relevant development standards in the Code.

Of particular note is the State Environmental Planning Policy (Exempt and Complying Development Codes) (Codes SEPP), including the Greenfield Housing Code Amendment and the recently published State Environmental Planning Policy (Exempt and Complying Development Codes) Amendment (Inland Code) 2018 (Inland Code).

Inland Code

Released by the Department of Planning and Environment in September 2018, the Inland Code will simplify the planning process for home owners in regional NSW.

The new Code applies to development for the purposes of new dwellings and renovations. It brings together and simplifies the planning rules for fast-track complying development approvals previously dealt with under the Exempt and Complying Development Codes SEPP.

The new Code and farm building standards will be included in the *State Environmental Planning Policy (Exempt and Complying Development Codes) 2008* (Codes SEPP) and aim to:

- » make it easy for new one and two storey homes and home renovations to be approved in rural and residential zones in 20 days or less
- » simplify and tailor development standards to suit development in rural and regional inland NSW
- » increase the use of complying development in inland NSW to help achieve faster housing approvals
- » allow rural landholders to construct a greater range of farm buildings without approval and obtain faster approvals for large farm buildings to support the agricultural use of their land.

New one and two storey homes and home renovations can be undertaken as complying development in inland NSW where the proposal meets all of the relevant development standards in the new Code. These standards have been developed following consultation with the community, councils and industry.

Greenfield Housing Code

Introduced in 2018 as an amendment to the Codes SEPP, the new [Greenfield Housing Code](#) (the Code) will speed up the delivery of new homes in greenfield areas (new release areas) across NSW to meet the needs of the State's growing population and improve housing affordability.

The new Code aims to:

- » simplify the standards in the State Policy for greenfield areas
- » tailor development standards to suit market demand, housing types and lot sizes typically delivered in greenfield areas; and
- » increase the take up of complying development to help achieve faster housing approvals.

The Greenfield Housing Code has been simplified by:

- » presenting the Code in plain English and including tables and diagrams to clearly explain the planning rules (similar to the Housing Code);
- » reducing and simplifying development standards; and
- » simplifying and aligning certain standards so they match the standards under the Growth Centres DCPs.

In Goulburn, the Code applies to land that is also identified as an Urban release Area (URA) and will allow 1 – 2 storey homes, alterations and additions to be carried out under the fast-track complying development approval pathway.

The Code requires a tree to be planted in the front and rear yard of each new home approved under complying development. The landscaping requirements in the new Code will ensure new release areas are leafier and more sustainable.

Although applicable to the URAs, the Code in itself does not replace the need for a Development Control Plan under clause 6.2A of the Local Environmental Plan.

The Low Rise Medium Density Housing Code

This Code was inserted into the SEPP (Exempt and Complying Development Codes) 2008 in an amendment and commenced on 6 July 2018.

The Low Rise Medium Density Housing Code allows one and two storey dual occupancies, manor houses and terraces to be carried out under a fast track complying development approval. A complying development approval can be issued within 20 days if the proposal complies with all the relevant requirements in the State Environmental Planning Policy (Exempt and Complying Development Codes) 2008 (the State Policy).

Low rise medium density housing helps housing affordability by providing smaller homes on smaller lots that still provide all the amenities of a single dwelling and can accommodate a wide variety of lifestyles and needs, including growing families or empty nesters.

Low rise medium density housing as complying development is only allowed in R1, R2, R3, and RU5 zones, where medium density housing is already permitted under a Council's Local Environmental Plan (LEP). The medium density complying development proposal must meet all of the development standards in the State Policy and the Design Criteria contained in the supporting Low Rise Medium Density Design Guide for complying development.

State Environmental Planning Policy (Sydney Drinking Water Catchment) 2011

The State Environmental Planning Policy (Sydney Drinking Water Catchment) 2011 applies to all land occurring in the Sydney Drinking Water Catchment (SDWC) and needs to be considered when any land within the SDWC is proposed for development.

This SEPP has three primary aims being:

- » To provide for healthy water catchments that will deliver high quality water and permit development that is compatible with that goal

- » To ensure that consent authorities only allow proposed developments that have a neutral or beneficial effect on water quality (NorBE)
- » To support water quality objectives in the Sydney drinking water catchment.

This SEPP gives effect to Water NSW's current recommended practices and standards, including the practice of referring development applications (and Planning Proposals) to Water NSW for concurrence where so required. The SEPP represents a key environmental constraint to the expansion of land for residential development where the site would be reliant on on-site waste treatment. This SEPP relates to Direction 5.2 Sydney Drinking Water Catchment.

Other Applicable SEPPs

A number of other State Environmental Planning Policies are particularly relevant to the delivery of housing, including:

SEPP 70 Affordable Housing

In February 2019 SEPP 70 was expanded to include all councils across NSW.

The next step in the process will be for councils to prepare affordable housing contribution schemes and amend their local environmental plans to reference the schemes. It is optional for a council to develop an affordable housing contribution scheme.

For this SEPP 'affordable housing' means *very low income households, low income households and moderate income households are those whose gross incomes fall within the following ranges of percentages of the median household income for the time being for the Greater Sydney (Greater Capital City Statistical Area) or the Rest of NSW (Greater Capital City Statistical Area) according to the Australian Bureau of Statistics:*

- » Very low income household
 - > less than 50%
- » Low income household
 - > 50 or more but less than 80%
- » Moderate income household
 - > 80-120%

Affordable Rental Housing SEPP

SEPP Affordable Rental Housing 2009 – The SEPP was introduced on 31 July 2009. The policy's intent is to increase the supply and diversity of affordable rental and social housing in the State.

The SEPP covers housing types including villas, townhouses and apartments that contain an affordable rental housing component, along with secondary dwellings (granny flats), new generation boarding houses, group homes, social housing and supportive accommodation.

The SEPP provides controls for infill affordable housing that is dual occupancies and multi dwelling housing in the R2 zone and dual occupancies, multi dwelling housing and residential flat buildings in the R1 zone and dual occupancies in the R5 zone.

Housing for Seniors SEPP

SEPP Housing for Seniors or People with a Disability 2004 does not apply to land within the Sydney Drinking Water Catchment.

Since 1982, the NSW Government has met the ongoing challenge of providing sufficient housing for seniors and people with a disability. State Environmental Planning Policy (SEPP 5) was introduced to deal with housing for older people and people with a disability.

In March 2004, the Department replaced SEPP 5 with a new policy focused on balancing growing demand for accommodation with maintaining the character and feel of local neighbourhoods - State Environmental Planning Policy (Seniors Living) 2004.

In September 2007, Amendment No 2 changed the name of the SEPP to State Environmental Planning Policy (Housing for Seniors or People with a Disability) 2004. It also introduced site compatibility certificates for seniors housing.

In October 2018, an amendment was made to change some rules for site compatibility certificates and to make the relevant planning panel the determining authority for site compatibility certificates issued under the Seniors SEPP.

State Environmental Planning Policy (Primary Production and Rural Development) 2019

The PPRD SEPP 2019 came into force on 28 February 2019. The SEPP repeals State Environmental Planning Policy No 30—Intensive Agriculture, State Environmental Planning Policy No 52—Farm Dams and Other Works in Land and Water Management Plan Areas, State Environmental Planning Policy No 62—Sustainable Aquaculture and State Environmental Planning Policy (Rural Lands) 2008.

The aims of this Policy are as follows:

- (a) to facilitate the **orderly economic use and development of lands for primary production**,
- (b) to **reduce land use conflict and sterilisation of rural land** by balancing primary production, residential development and the protection of native vegetation, biodiversity and water resources,
- (c) to **identify State significant agricultural land** for the purpose of ensuring the ongoing viability of agriculture on that land, having regard to social, economic and environmental considerations,
- (d) to simplify the regulatory process for smaller-scale low risk artificial waterbodies, and routine maintenance of artificial water supply or drainage, in irrigation areas and districts, and for routine and emergency work in irrigation areas and districts (not applicable in Hilltops)
- (e) to **encourage sustainable agriculture**, including sustainable aquaculture,
- (f) to require consideration of the effects of all proposed development in the State on oyster aquaculture,
- (g) to identify aquaculture that is to be treated as designated development using a well-defined and concise development assessment regime based on environment risks associated with site and operational factors.

B Regional Plan

Draft Urban and Fringe Housing Strategy

Consistency with South East and Tablelands Regional Plan

There are a number of directions and actions in the Regional Plan that have been considered in the development of the Strategy. Note that only those that specifically relate to housing or land that is within the urban and fringe study area have been included in the following table.

South East and Tablelands Regional Plan		Urban and Fringe Housing Strategy
Goal 1: A connected and prosperous economy		
Direction/Action	Action	Implementation outcome
Direction 8: Protect important agricultural land		
8.1 Map important agricultural land to better inform strategic and local planning processes.	Work with Department of Primary Industry to support the preparation of important agricultural land mapping for the South East and Tablelands Regional Plan area. The Planning Proposal for urban land considers important agricultural land mapping	Future urban land excludes , where practical, important agricultural land
8.2 Protect identified important agricultural land from land use conflict and fragmentation and manage the interface between important agricultural land and other land uses through local environmental plans.	Consider the implementation of buffers; natural and built to protect productive agricultural land from the impact of urban development	
Direction 13 Manage the ongoing use of mineral resources.		
13.1 Consult with the NSW Division of Resources and Geosciences when assessing applications for land use changes (strategic land use planning, rezoning and planning proposals) and new developments or expansions.	Consultation with NSW Division of Resources and Geosciences during exhibition of Strategy Avoid identification of additional urban land adjacent to extractive industries around Marulan	Future urban land does not encroach on existing mineral resources.
13.2 Protect areas of mineral and energy resources potential through local strategies and local environmental plans.		

South East and Tablelands Regional Plan		Urban and Fringe Housing Strategy
Goal 2: A diverse environment interconnected by biodiversity corridors		
Direction/Action	Action	Implementation outcome
Direction 14: Protect important environmental assets		
14.2 Protect the validated high environmental value lands in local environmental plans.	Identification of land with high biodiversity value in the Strategy study area verified by EcoLogical for the Planning Proposal. Where such land cannot be avoided, development will be minimised and or offset.	Future urban land excludes land with high environmental value.
14.3 Minimise potential impacts arising from development on areas of high environmental value, including groundwater-dependent ecosystems and aquatic habitats, and implement the 'avoid, minimise and offset' hierarchy.	Provide water, sewer and drainage infrastructure to support urban development.	
Direction 15: Enhance biodiversity connections		
15.1 Protect and enhance the function and resilience of biodiversity corridors in local strategies.	Urban development will avoid identified biodiversity corridors	Biodiversity corridors avoided.
Direction 18: Secure water resources.		
18.1 Locate, design, construct and manage new developments to minimise impacts on water catchments, including downstream impacts and groundwater sources.	Consider the impact of urban development on the Sydney Drinking Water Catchment.	No adverse impact on the water catchment
18.3 Prepare or review integrated water cycle management strategies to ascertain long-term infrastructure needs to accommodate population growth.	Review water cycle management strategies to include the additional urban areas identified in the Strategy as part of the Planning Proposal process.	Water cycle management strategies area up to date
18.4 Incorporate water sensitive urban design into development that is likely to impact water catchments, water quality and flows.	Urban Release area identified in the Strategy should include WSUD in corresponding Development Controls Plans.	WSUD principles applied to all new development
Goal 3: Healthy and connected communities		
Direction 22: Build socially inclusive, safe and healthy communities		
22.1 Develop best-practice guidelines for planning, designing and developing healthy built environments and use the Neighbourhood Planning Principles (Appendix A) in local environmental plans, development control plans and local strategies in the interim.	Include Neighbourhood Planning Principles in the consideration of the future development of Urban Release Areas under the Planning Proposal	Urban Release Areas identified with corresponding guidelines to facilitate development in the short term.
22.2 Adopt elements of Liveable Housing Australia's Liveable Housing Design Guidelines in development controls for housing, where possible.	Include Liveable Housing controls into DCPs that support Urban Release Areas	

South East and Tablelands Regional Plan	Urban and Fringe Housing Strategy	
22.3 Integrate walking and cycling networks into the design of new communities to encourage physical activity.	Consider connectivity in preparing Neighbourhood Structure Plans and development concept plans for Urban Release Areas	
22.4 Promote energy efficiency in new development proposals.	Include energy efficiency and sustainable design principles into DCPs	
Goal 3: Healthy and connected communities		
Direction/Action	Action	Implementation outcome
Direction 23: Protect the region's heritage.		
23.1 Undertake and implement heritage studies, including regional Aboriginal cultural heritage studies, to inform local strategies.	Consult with Aboriginal people during the exhibition of the Strategy	Urban Release areas avoid or minimise harm to environmental heritage
23.2 Consult with Aboriginal people and the broader community to identify heritage values at the strategic planning stage.	Undertake detailed Aboriginal Cultural Heritage Assessment to inform the Planning Proposal prior to public exhibition.	
23.3 Conserve heritage assets during local strategic planning and development	Consider the opportunities for adaptive re-use of Heritage Buildings, particularly in relation to providing incentives for redevelopment within the Goulburn Town Centre for higher density development	Heritage Items area preserved through adaptive re-use.
Goal 4: Environmentally sustainable housing choices		
Direction 24: Deliver greater housing supply and choice.		
24.1 Prepare guidelines for local housing strategies.	The Strategy has been prepared having regard to the Draft guideline for the preparation of housing strategies and the Settlement Planning Principles	Strategy Adopted by Council and DPE
24.2 Prepare local housing strategies consistent with the Settlement Planning Principles to provide a surplus supply of residential land to meet projected housing needs.		
24.3 Promote increased housing choice including townhouses, villas and apartments in strategic centres and locations close to existing services and jobs.	Provide a for a range of housing typologies to suit the demands of the changing demographic of the current population and the incoming population.	Planning controls provide for housing choice.
24.4 Promote opportunities for retirement villages, nursing homes and similar housing for seniors in local housing strategies.	Ensure that planning controls provide opportunity for housing for older people.	
Direction 25: Focus housing growth in locations that maximise infrastructure and services.		
25.1 Focus future settlement to locations that: <ul style="list-style-type: none">• maximise existing infrastructure and services and minimise the need for new services;• prioritise increased densities within existing urban areas; and	Identifies areas that are in sequence. Recognises the need to extent the urban footprint into areas that area readily accessible and can be connected to existing infrastructure	A development footprint that demonstrated sequential release of land

South East and Tablelands Regional Plan		Urban and Fringe Housing Strategy
<ul style="list-style-type: none"> • prioritise new release areas that are an extension of existing strategic and local centres. 		Provides opportunities for increase in densities closer to the town centre of Goulburn
25.2 Plan for and prioritise services and infrastructure investment to maximise cost efficiencies, coordinate the delivery of different infrastructure assets, and achieve equitable sharing of responsibility, including funding, procurement and ongoing maintenance.		Local Infrastructure delivered by the developer and apportioned to new development with no cost to the community.
Goal 4: Environmentally sustainable housing choices		
Direction/Action	Action	Implementation outcome
Direction 27: Deliver more opportunities for affordable housing.		
27.1 Deliver greater housing affordability by incorporating policies and tools into local housing strategies and local planning controls that will enable a greater variety of housing types and incentivise private investment in affordable housing.	Provide a range of housing typologies. Retain planning controls in the LEP that allow a range of residential accommodation across the residential zones.	Ready supply of land to the market to meet demand. A range of housing types available.
27.2 Facilitate greater housing diversity, including studios and one- and two-bedroom dwellings, to match forecast changes in household sizes.	Ensure development is readily able to be connected to services and devoid of high value biodiversity thereby reducing the cost of development.	Reduction in wait times for rental accommodation.
Direction 28: Manage rural lifestyles.		
28.1 Enable new rural residential development only where it has been identified in a local housing strategy prepared by council and approved by the Department of Planning and Environment.	Adoption of the Strategy by Council and DPE	Strategy Adopted.
28.2 Locate new rural residential areas: <ul style="list-style-type: none"> • close to existing urban settlements to maximise the efficient use of existing infrastructure and services, including roads, water, sewer and waste services, and social and community infrastructure; • to avoid and minimise the potential for land use conflicts with productive, zoned agricultural land and natural resources; and • to avoid areas of high environmental, cultural and heritage significance, important agricultural land and areas affected by natural hazards. 	Consider a defined urban fringe for the Strategy. Include a set of development principles that can be applied to future unsolicited Planning Proposals. Consider adjoining land uses, including agricultural land as part of the assessment criteria for urban expansion.	Rezoning of land is controlled by planning principles
28.3 Manage land use conflict that can result from cumulative impacts of successive development decisions.		

C LEP Provisions

Draft Urban and Fringe Housing Strategy

Land Use Tables

Orange differences

Red permissible in R2 with Consent

Green SI LEP

Zone R1 General Residential	Zone R2 Low Density Residential	Zone R5 Large Lot Residential
<p>1 Objectives of zone</p> <ul style="list-style-type: none"> To provide for the housing needs of the community. To provide for a variety of housing types and densities. To enable other land uses that provide facilities or services to meet the day to day needs of residents. To maintain the economic strength of commercial centres by limiting the retailing of food and clothing. 	<p>1 Objectives of zone</p> <ul style="list-style-type: none"> To provide for the housing needs of the community within a low density residential environment. To enable other land uses that provide facilities or services to meet the day to day needs of residents. To maintain the economic strength of commercial centres by limiting the retailing of food and clothing. 	<p>1 Objectives of zone</p> <ul style="list-style-type: none"> To provide residential housing in a rural setting while preserving environmentally sensitive locations and scenic quality. To ensure that large residential lots do not hinder the proper and orderly development of urban areas in the future. To ensure that development in the area does not unreasonably increase the demand for public services or public facilities. To minimise conflict between land uses within this zone and land uses within adjoining zones. To facilitate and promote an increased range of residential opportunities by providing for low intensity residential development compatible with the rural characteristics of the locality. To encourage subdivision of land that is consistent with the constraints and opportunities of the land.
<p>2 Permitted without consent</p> <p>Home occupations; Roads</p>	<p>2 Permitted without consent</p> <p>Home occupations; Roads</p>	<p>2 Permitted without consent</p> <p>Home occupations; Roads</p>
<p>3 Permitted with consent</p> <p>Attached dwellings; Bed and breakfast accommodation; Boarding houses; Centre-based child care facilities; Community facilities; Dwelling houses; Food and drink premises; Group homes; Home industries; Hostels; Multi dwelling housing; Neighbourhood shops; Places of public worship; Plant nurseries; Residential flat buildings; Respite day care centres; Semi-detached dwellings; Seniors housing; Serviced apartments; Shop top housing; Any other development not specified in item 2 or 4</p>	<p>3 Permitted with consent</p> <p>Attached dwellings; Bed and breakfast accommodation; Boarding houses; Centre-based child care facilities; Community facilities; Dwelling houses; Food and drink premises; Group homes; Home industries; Hostels; Multi dwelling housing; Neighbourhood shops; Places of public worship; Respite day care centres; Semi-detached dwellings; Seniors housing; Serviced apartments; Shop top housing; Any other development not specified in item 2 or 4</p>	<p>3 Permitted with consent Red and breakfast accommodation; ; Boarding houses; Centre-based child care facilities; Community facilities</p> <p>Building identification signs; Dwelling houses; Group homes; Hostels; Home industries; Plant nurseries; Neighbourhood shops; Places of public worship; Respite day care centres; Semi-detached dwellings; Seniors housing; Serviced apartments; Shop top housing; Any other development not specified in item 2 or 4</p>

D Constraints and Land Suitability

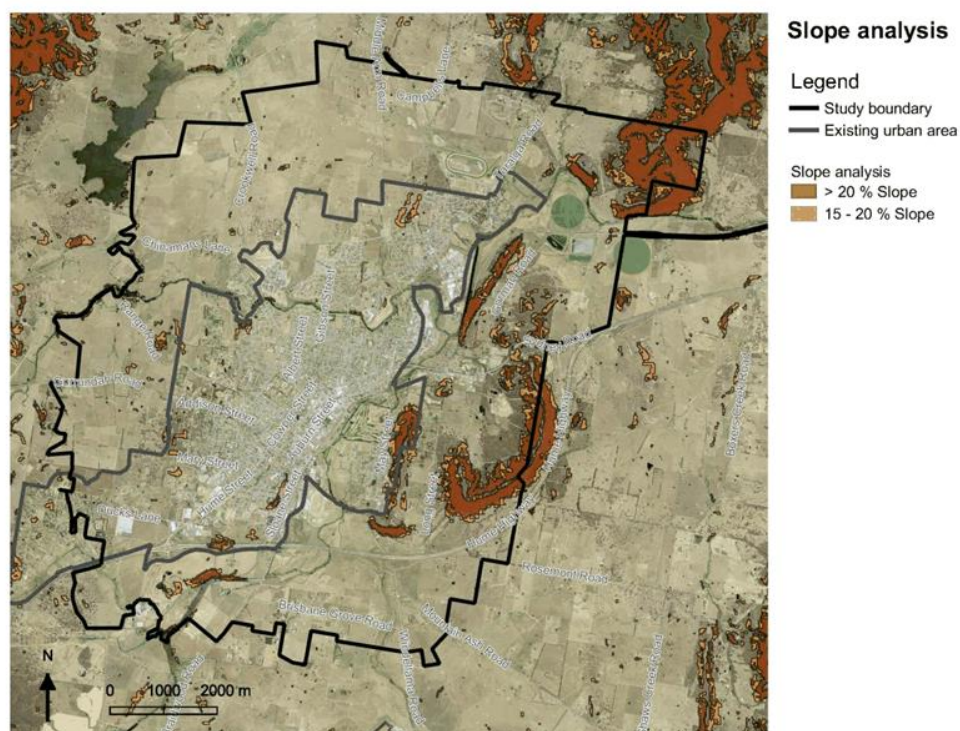
Draft Urban and Fringe Housing Strategy

Constraints and Land Suitability

Topography

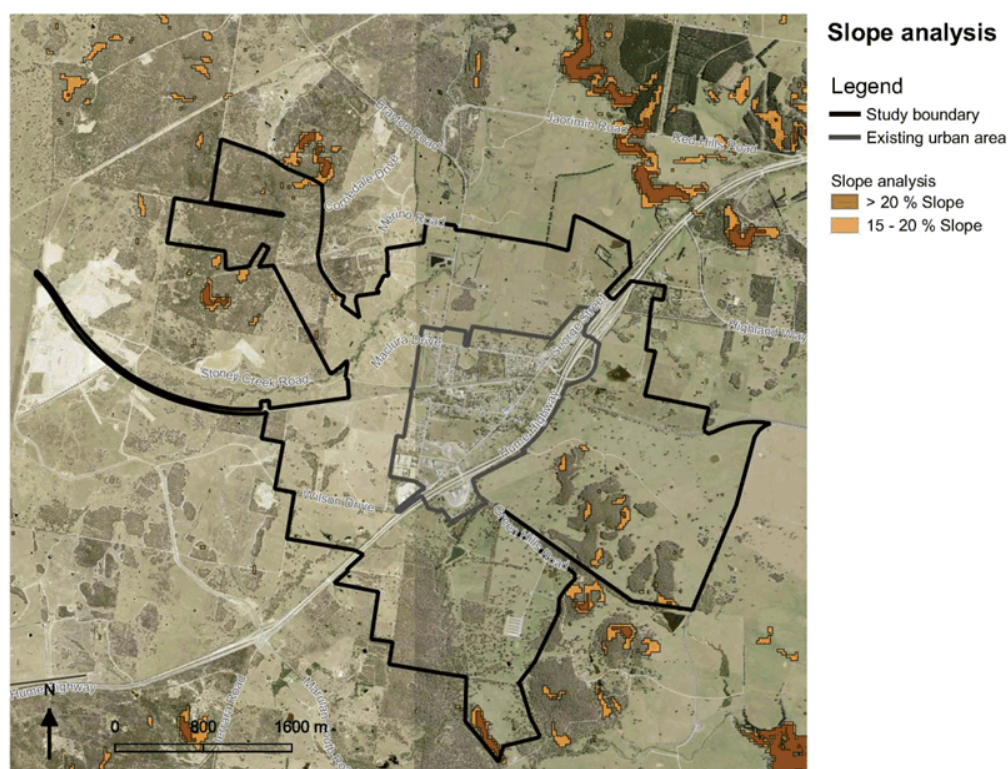
Goulburn is located at the confluence of the Wollondilly and Mulwaree Rivers and is within the Sydney Drinking Water Catchment. The terrain is alternately flat plains and undulating with significant ridgelines trending north-east including Rocky Hill, Mt Gray and north to Cookbundoon Range.

Figure 1 Goulburn Slope Analysis



Goulburn Mulwaree Council GIS data

Marulan is located on the Meridian line and its surrounding hills are mined for hard rock aggregate and limestone.

Figure 2 Marulan Slope Analysis

Goulburn Mulwaree Council GIS data

Flood Prone Land

Flood prone land presents a significant constraint to development as it has implications with respect to the capital cost and provision of infrastructure, roads and the location of highly sensitive land uses such as schools and aged care facilities. All land which interfaces with the main water bodies should be avoided or carefully considered if proposed for residential development. When considering the suitability of land for residential use it is important to consider whether road access will be cut off during a flood event as well as whether the land itself is subject to flooding.

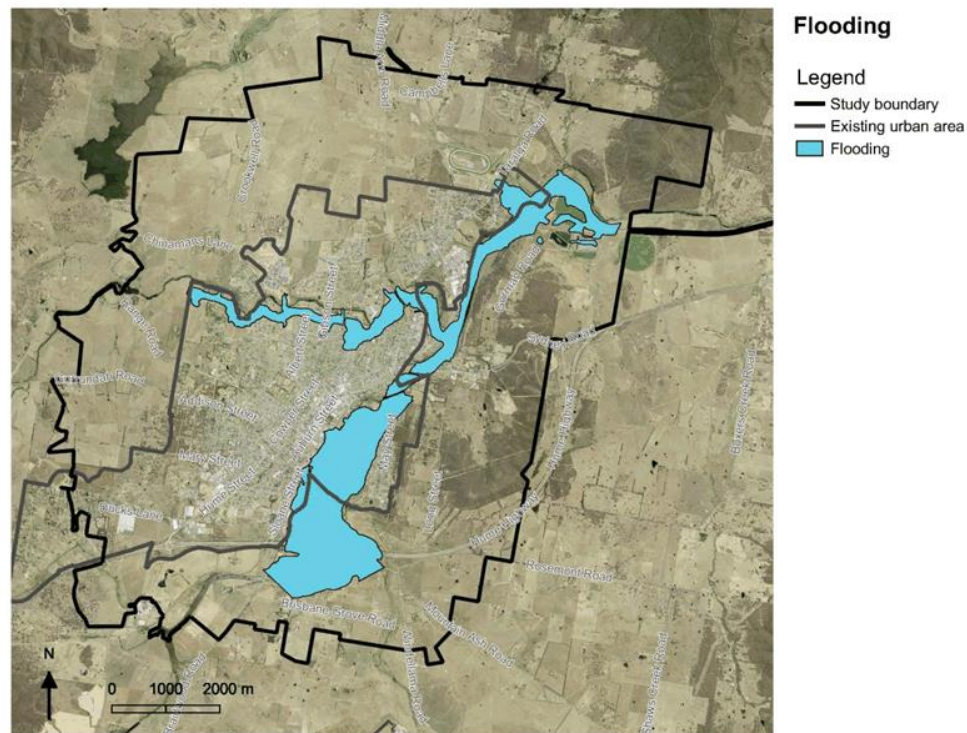
The Goulburn Mulwaree LEP 2009 flood map is based on the 2003 *Wollondilly River and Mulwaree Chain-of-Ponds Floodplain Risk Management Study and Plan*, and is generally consistent with the flood prone land identified in the *Wollondilly and Mulwaree Rivers Flood Study 2016* (2016 Flood Study). Both the LEP flood map and the 2016 Flood Study clearly articulate the flood impacts for Goulburn.

The 2003 Wollondilly River and Mulwaree Chain-of-Ponds Floodplain Risk Management Study and Plan remains current for the purposes of flood planning while Council prepares a new flood plain risk management study and plan that will supersede this by 2021. The new study will also assess risks posed by Major Overland Flow (MOF) type flooding.

The 2016 Flood Study identified the potential for heavier rainfall in both the Mulwaree and Wollondilly catchments as a direct impact of climate change. The Study found that the system is highly sensitive to increases in rainfall intensity in part because the Wollondilly is constricted

downstream of its confluence with the Mulwaree causing flood water to 'back up' resulting in a large increase in peak flood levels.

Figure 3 Goulburn Flooding



Source: Goulburn Mulwaree LEP 2009 Flood Planning Map

A flood study for Marulan has been recommended as there is no land currently mapped as flood prone in Marulan. There are two major creeks in Marulan.

- » Jaorimin Creek flows north past Holcim Quarry in the west of the village through the Marulan North precinct to join the Wollondilly River.
- » Barbers Creek flows west from near Tallong to Marulan South where it is joined by Woolshed Creek and Marulan Creek, then continues south to join the Shoalhaven River.

A desktop analysis of Marulan's waterways and topography indicates that parts of Marulan may experience some flooding, particularly the area north of the Marulan Town Centre and adjacent to Brayton Road. Site specific flood studies should be undertaken when considering land in and around Marulan for residential use.

Sydney Drinking Water Catchment

Almost the entire Goulburn Mulwaree LGA falls into the SDWC. Watercourses in the LGA are part of either the Warragamba Catchment or Shoalhaven Catchment, with Marulan positioned on the watershed between the two.

WaterNSW protects the health of the Sydney catchment area to ensure reliable, quality drinking water. Management of the SDWC is based on the best science and technical information, best management practices, and the experience of landowners and other catchment stakeholders.

Development in the catchment must have a neutral or beneficial effect (NorBE) on water quality. A wide range of land uses can affect water quality including by-products of catchment activities such as sewerage system discharges, run-off from agricultural land and urban developments. When considering whether a development will meet the NorBE test, possible impacts on both surface and groundwater are considered.

WaterNSW has developed strategic land and water capability assessments (SLWCA) for land in the catchment. The following information has been provided by NSW Water.

NSW Water land use planning and zoning

Local councils are responsible for land use zoning in the catchment. To protect water quality, it is important to ensure zoning decisions are consistent with the physical capability of land.

The SLWCA assists councils to prepare and review their local environmental plans (LEPs) and decide on land use zoning and other provisions that are appropriate to protect water quality. WaterNSW has provided councils with SLWCA data, maps, guidelines and training to help prepare their LEPs. These inputs included:

- » *slope*
- » *soil erodibility*
- » *soil permeability*
- » *soil depth*
- » *distance to watercourses*
- » *vegetation cover.*

Stage two of the SLWCA involved modelling of land and water capability for 10 land use types:

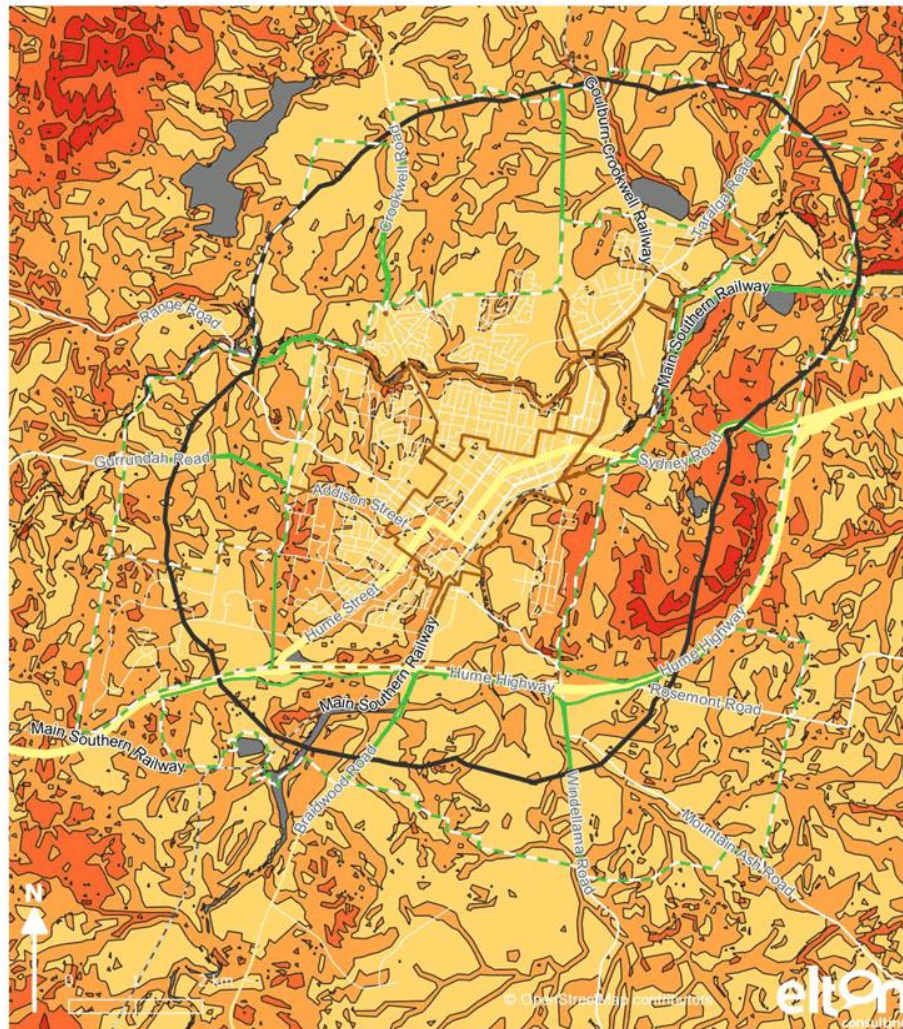
- » *Intensive livestock agriculture*
- » *Intensive plant agriculture*
- » *Extensive agriculture*
- » *Forestry*
- » *Residential unsewered lots 2,000 - 4,000 square metres*
- » *Residential unsewered lots 4,000 square metres - 2 hectares*
- » *Residential sewerer lots*
- » *Retail/ Commercial*
- » *Light Industrial*
- » *Hazardous/ Heavy Industrial.*

SLWCA maps for the entire drinking water catchment are available to the public for each of the land use types listed above.

The SLWCA maps show land use capability, based on risk to water quality as

Land Use Capability High, moderate, Low and Very Low and risk to water quality as Low, Moderate, High and Extreme. These categories as they apply to Goulburn and Marulan are shown on the following maps.

Figure 4 Residential sewered land risk to water quality - Goulburn



Legend

Residential sewered risk to water quality

- Low
- Moderate
- High
- Extreme
- Waterbody

Figure 5 Residential sewered land risk to water quality - Marulan

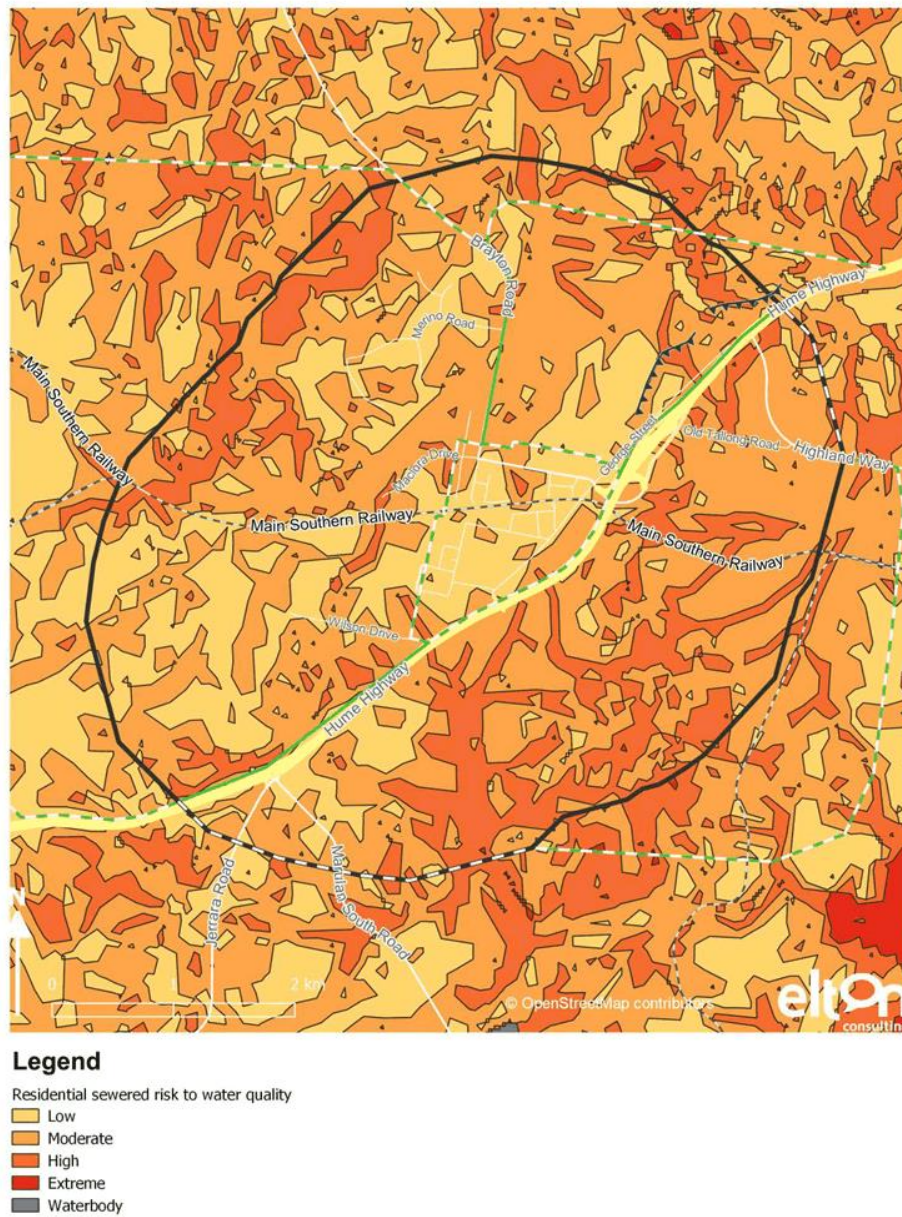


Figure 6 Unsewered lots 4000sqm to 2ha – Goulburn

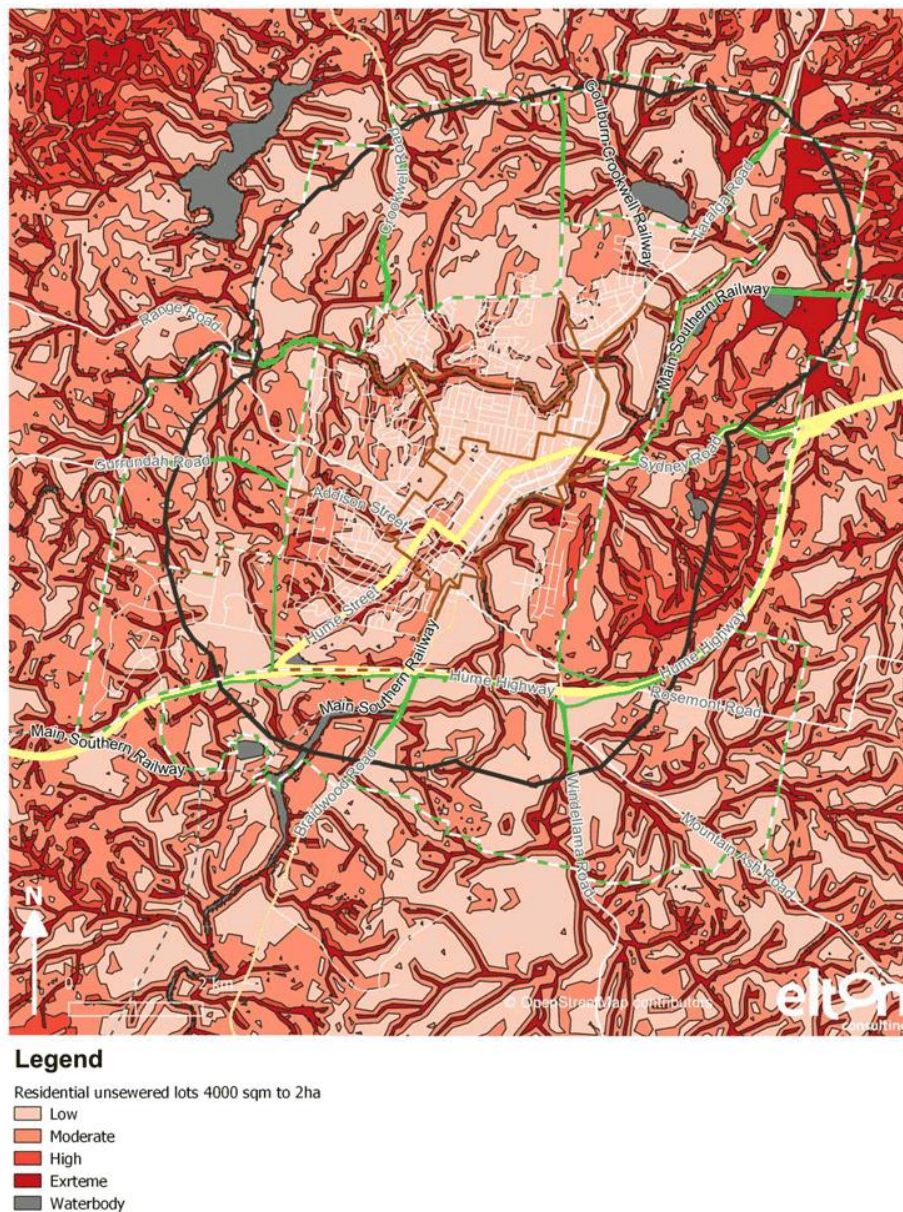
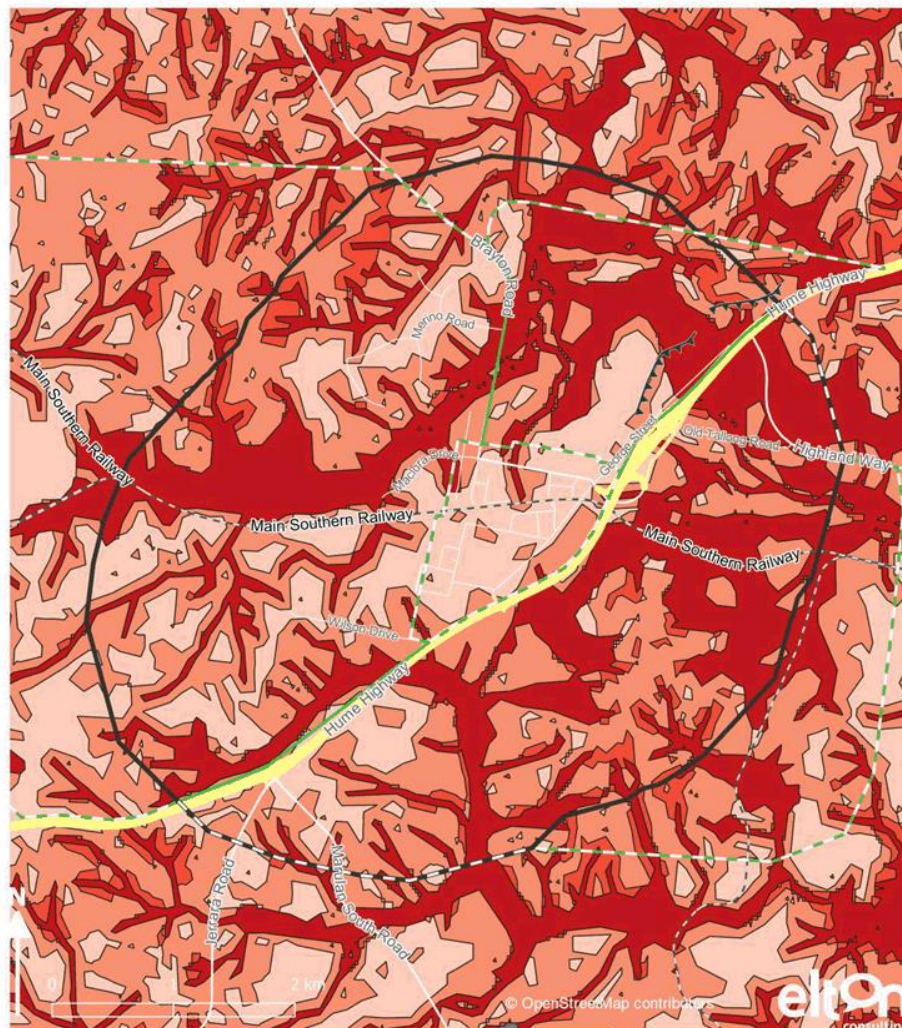


Figure 7 Unsewered lots 4000sqm – 2ha – Marulan**Legend**

Residential unsewered lots 4000 sqm to 2ha

- Low
- Moderate
- High
- Extreme
- Waterbody

The capability mapping has also been undertaken for Goulburn and in relation to soil erodability and depth and slope and vegetation. All of these factors will be important in determining the suitability of land of residential development, particularly unserved development.

Figure 8 Eroability – Goulburn



Figure 9 Slope – Goulburn

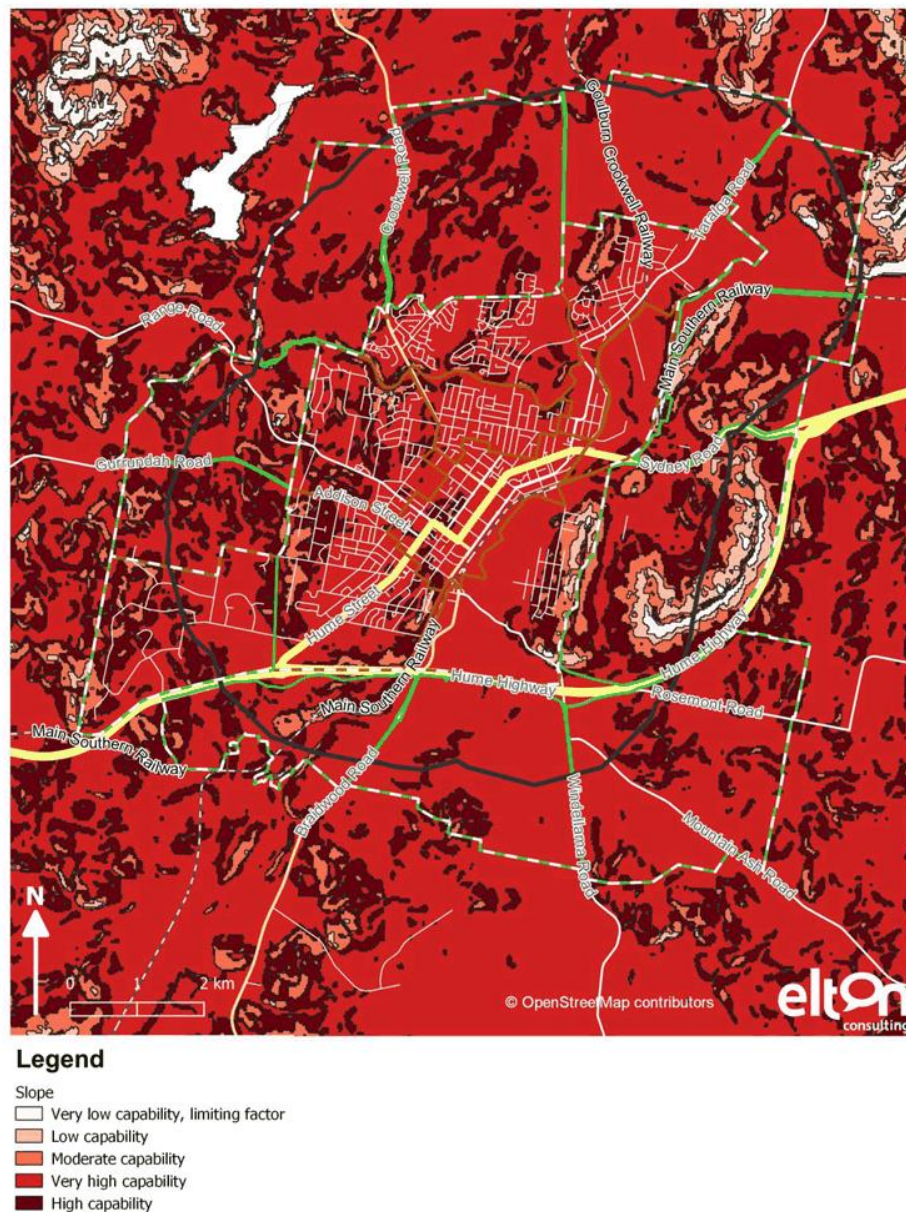
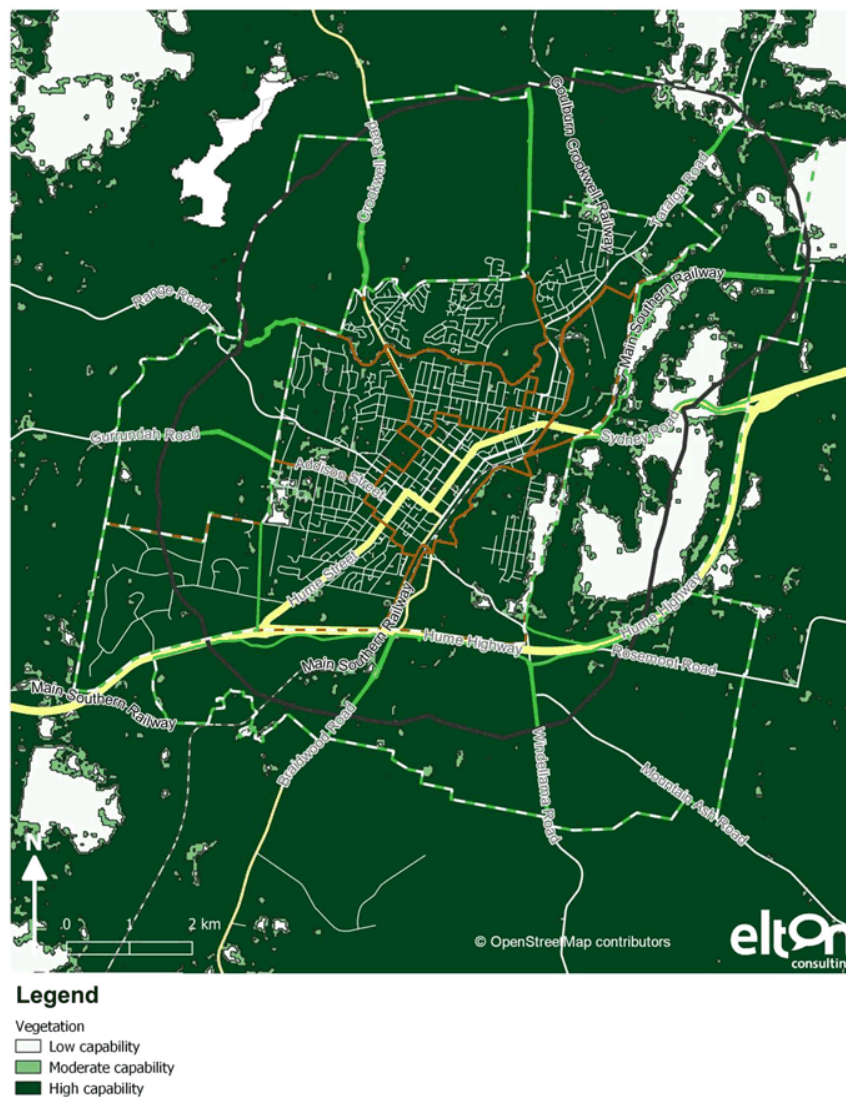


Figure 10 Vegetation – Goulburn

SLWCA can be used by councils, other planning authorities, and WaterNSW to help determine the potential impact of future land use changes on water quality. Planning authorities can use information from the SLWCA with other environmental constraints mapping and data, and social and economic information, to help develop their planning proposals. Incorporating capability information at an early stage will help planning authorities to decide land use zones and accompanying land uses that are most likely to have a neutral or beneficial effect on water quality.

Biodiversity and Drainage

The main objective of identifying sensitive biodiversity is to maintain terrestrial biodiversity by protecting native fauna and flora whilst encouraging the conservation of habitats. Biodiversity has already been recognised by Council as a significant constraint to development.

The Terrestrial Biodiversity Map adopted in the GMLEP provided a starting point for the assessment by EcoLogical Australia. The GMLEP mapping was undertaken using a combination of spatial modelling, aerial photography and limited field validation. It is a tool, rather than definitive data and was introduced into the GMLEP to provide a guide for Council to determine whether a particular development application is likely to require further investigation into the potential impacts on biodiversity.

In 2014, Council and the Office of Environment and Heritage (OEH) undertook a project to map and describe in more detail vegetation within a 10km radius of Goulburn township. Two priority areas were identified north and south including the area adjacent to Marys Mount.¹ The outcome of the mapping project was the identification of vegetation communities and habitat in two particular areas as illustrated in Figure 5 and 6 below.

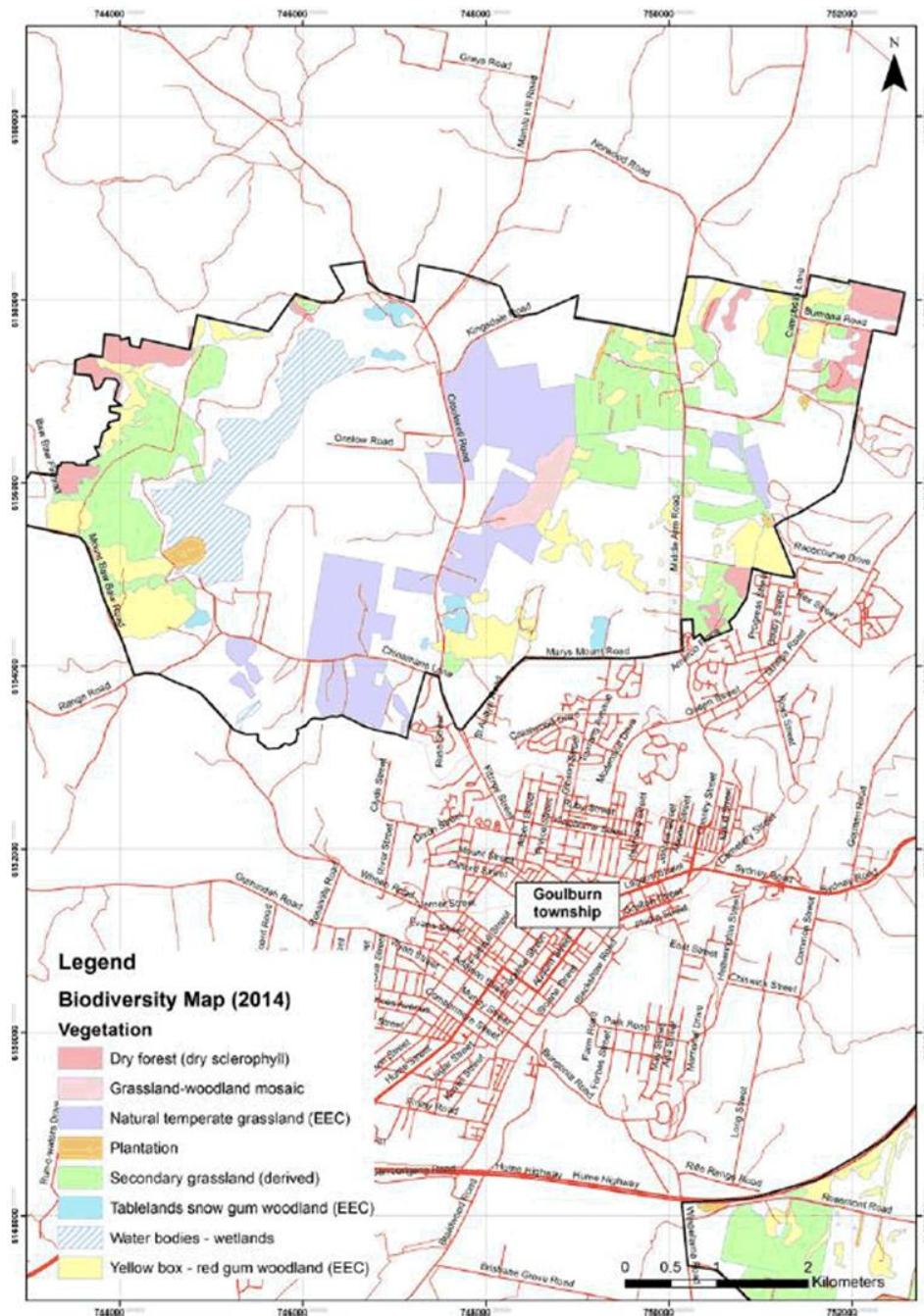
During the Public Exhibition of the Urban and Fringe Housing Strategy for Goulburn and Marulan, a number of submissions highlighted inconsistencies between the GMLEP and 2014 biodiversity mapping, and what is currently present on the ground. In response, a more recent data set provided by OEH² mapping areas of 'High Environmental Value' (HEV) was applied across all fringe precincts. In addition, EcoLogical Australia (ELA) have undertaken drive-by observations for particular areas within precincts where discrepancies were reported. The updated ELA report is included at **Appendix F**.

This data provides a much more definitive indication of the likely impact of development. It still does not eliminate the need for site specific investigation, however, this can, as a result be more targeted.

¹ Goulburn-Mulwaree Local Environmental Plan, Biodiversity map validation project, 2014.

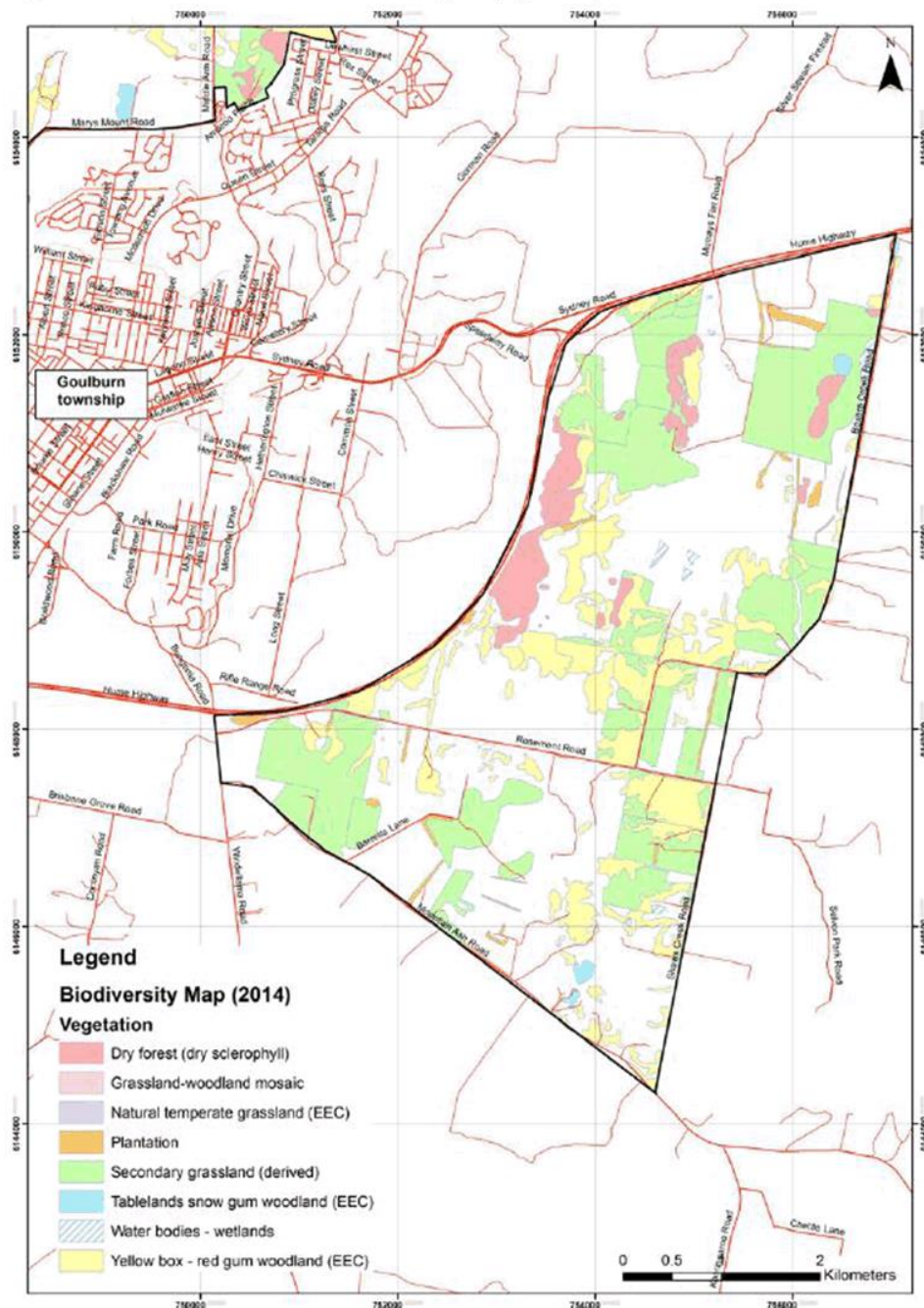
² The functions of OEH were assumed by the Department of Planning, Industry and Environment (DPIE) effective 1 July 2019

Figure 11 2014 Goulburn Biodiversity Map (north)



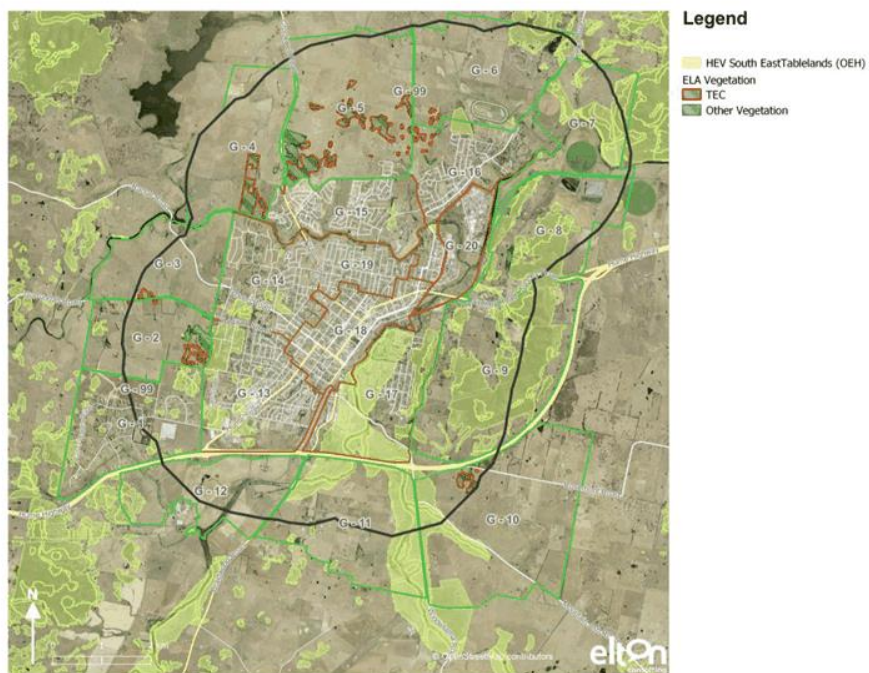
Source: Goulburn-Mulwaree Local Environmental Plan, Biodiversity map validation project, 2014.

Figure 12 2014 Goulburn Biodiversity Map (south)



Source: Goulburn-Mulwaree Local Environmental Plan, Biodiversity map validation project, 2014.

Figure 13 Goulburn High Environmental Value mapping



Source: OEH and Ecological Australia, 2019.

Figure 14 Marulan High Environmental Value mapping

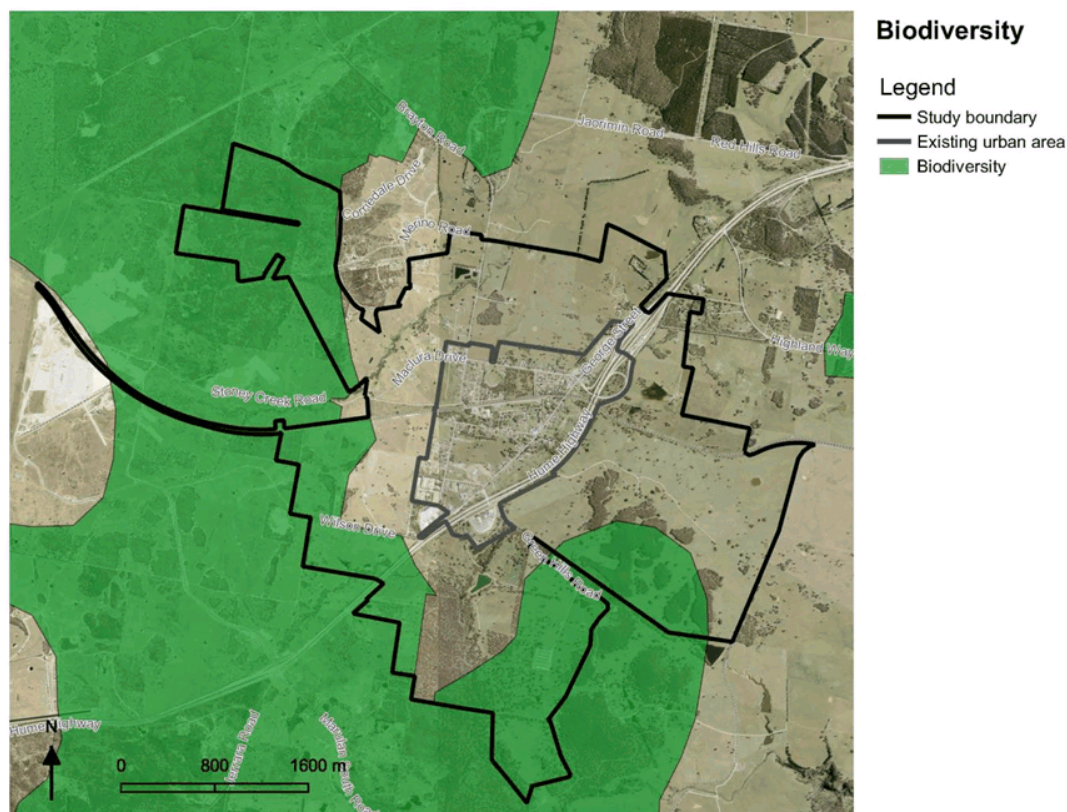


OEH and Ecological Australia, 2019.

Source:

In Marulan Terrestrial Biodiversity Mapping has been updated from the original published GMLEP Terrestrial Biodiversity Map (below) to the OEH High Environmental Value mapping as shown above.

Figure 15 GMLEP 2009 Marulan Biodiversity



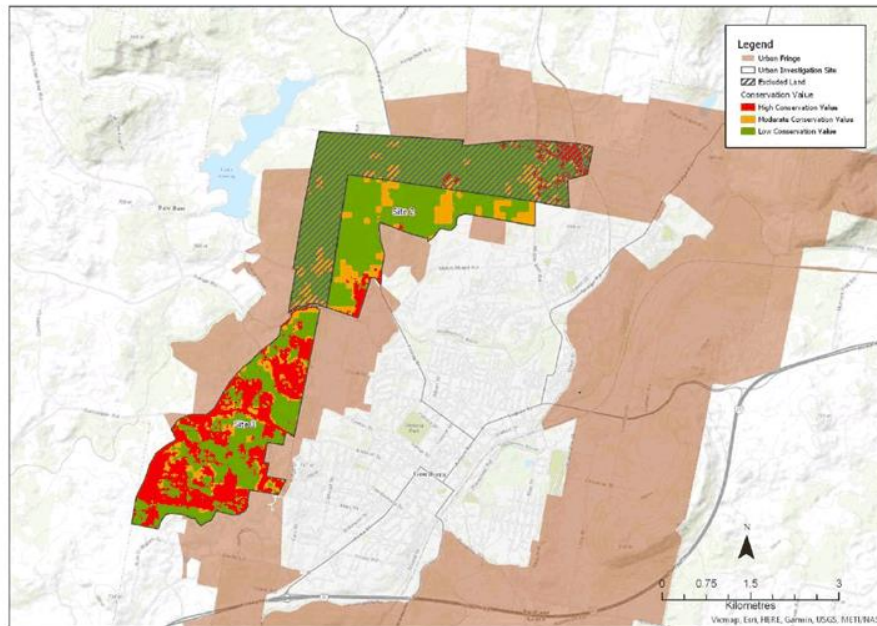
Source: Goulburn Mulwaree Council LEP 2009 Terrestrial Biodiversity Map Refer also Ecological Report

Additional Assessment of key sites by Ecological Australia

In addition to the mapping undertaken in the Biodiversity Map Validation Project, Ecological Australia were engaged to review the urban fringe and sites initially identified as otherwise generally suitable for urban development.

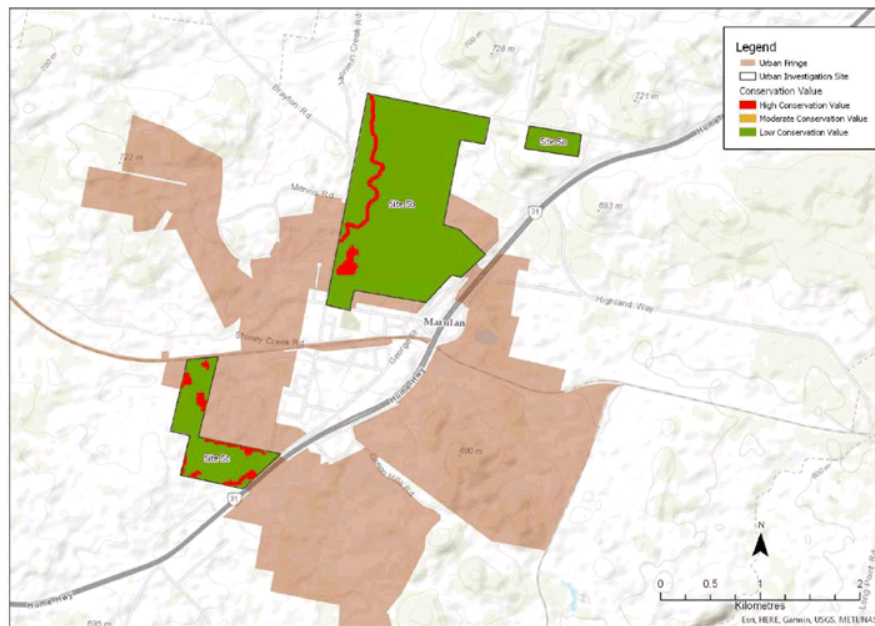
The work undertaken by Ecological Australia focused on the sites initially identified as having some potential for urban development. It is noted that the initial site assessment identified two areas for urban growth; land immediately contiguous with the urban zones to the north of Marys Mount and land to the west of Goulbourn bounded by the river. The former was considered the most suitable area for the expansion of R2 Low Density residential development. The latter was being considered for a mix of R2 Low Density residential and larger lots 2,000m²-2ha providing a buffer to the watercourse and agricultural land beyond. However, as can be seen in the Figure below, the western area is significantly constrained and as a result no longer considered suitable for any form of residential intensification.

Figure 16 Target Areas Conservation Value Goulburn



Source: Ecological Australia 2018 (refer also **Appendix F**)

A similar result was found in Marulan where the Terrestrial Biodiversity Mapping proved an unreliable source for the identification of land with a high conservation value and the development footprint identified for Marulan following the initial assessment also needed further refinement.

Figure 17 Target Areas Conservation Value Marulan

Source: Ecological Australia 2018 (refer also Appendix G).

Mapped and validated HEV and EECs show the areas of vegetation in the Goulburn Fringe which have high conservation values and should not be developed for residential use.

The 2019 verified vegetation types identified by ELA and mapped below are conservation value areas (excluding areas mapped as 'disturbed – exotic dominant' and 'plantation'). The area labelled South Chinaman's Lane requires further investigation as to the current quality of grassland vegetation.

Legend

- Rural Residential Precincts
- Urban Fringe

Vegetation (2019)

- Disturbed - Exotic dominant
- Plantation
- Dry forest (dry sclerophyll)
- Natural temperate grassland (EEC)
- Secondary grassland (derived)
- Scribbly / Snow Gum
- Tableland Gassy Box-Gum Woodland (EEC)
- Tableland Low Woodland
- Tablelands snow gum woodland (EEC)
- Western Tablelands Dry Forest
- Yellow box - red gum woodland (EEC)

Riparian corridors are also considered as areas of conservation value. The NSW DPI Office of Water outlined that "the protection, restoration or rehabilitation of vegetated riparian corridors is important for maintaining or improving the shape, stability (or geomorphic form) and ecological functions of a watercourse"³⁹.

- » providing bed and bank stability and reducing bank and channel erosion
- » protecting water quality by trapping sediment, nutrients and other contaminants
- » providing diversity of habitat for terrestrial, riparian and aquatic plants (flora) and animals (fauna)
- » providing connectivity between wildlife habitats
- » conveying flood flows and controlling the direction of flood flows

⁴ NSW Government DPI Office of Water 'Guidelines for riparian corridors on waterfront land' July 2012
http://www.water.nsw.gov.au/_data/assets/pdf_file/0004/547222/licensing_approvals_controlled_activities_riparian_corridors.pdf accessed July 2019

- » providing an interface or buffer between developments and waterways
- » providing passive recreational uses

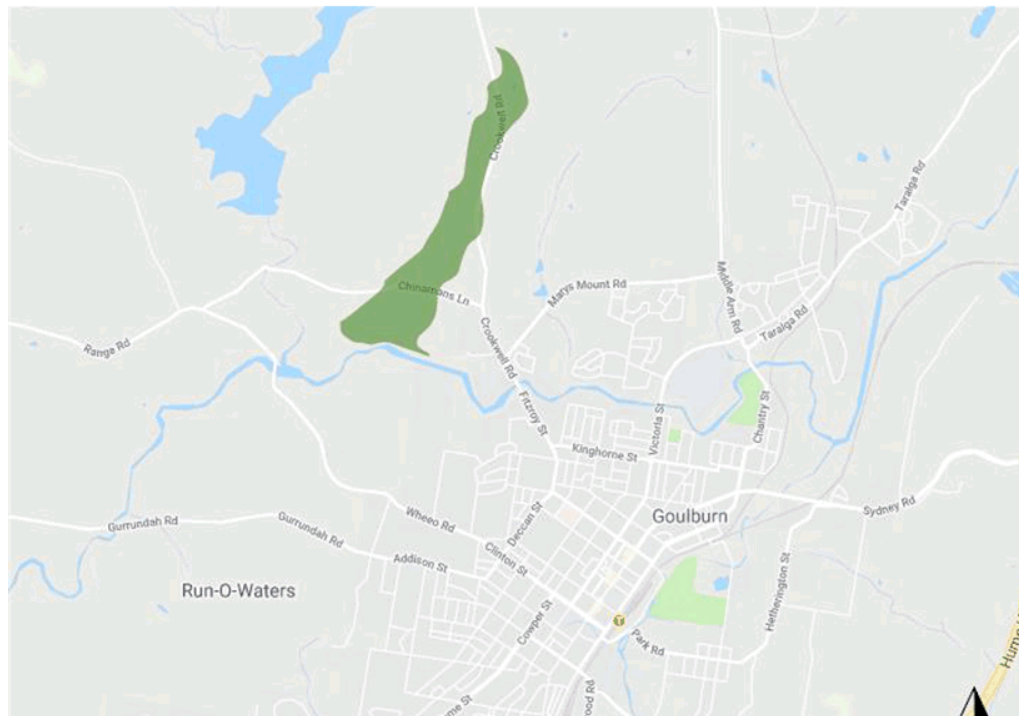
The location of riparian corridor buffers in Goulburn and Marulan are now identified on the updated constraints mapping in the Strategy.

Biophysical Strategic Agricultural Land

Agriculture is an important land use within the region contributing significantly to regional economic performance. Protection of agricultural land is, in part, governed by the Rural Lands SEPP and the subdivision principles therein.

The constraints mapping identified a parcel of Biophysical Strategic Agricultural Land (BSAL) identified under the State Environmental Planning Policy (Mining, Petroleum Production and Extractive Industries) 2007. The land affected runs from the Wollondilly River, north across Chinamans Lane to Crookwell Road and was initially almost wholly within the area identified under the preliminary assessment as otherwise suitable for urban development. This area will require further assessment prior to any development.

Figure 19 Biophysical Strategic Agricultural Land



Source: <https://www.planningportal.nsw.gov.au/>.

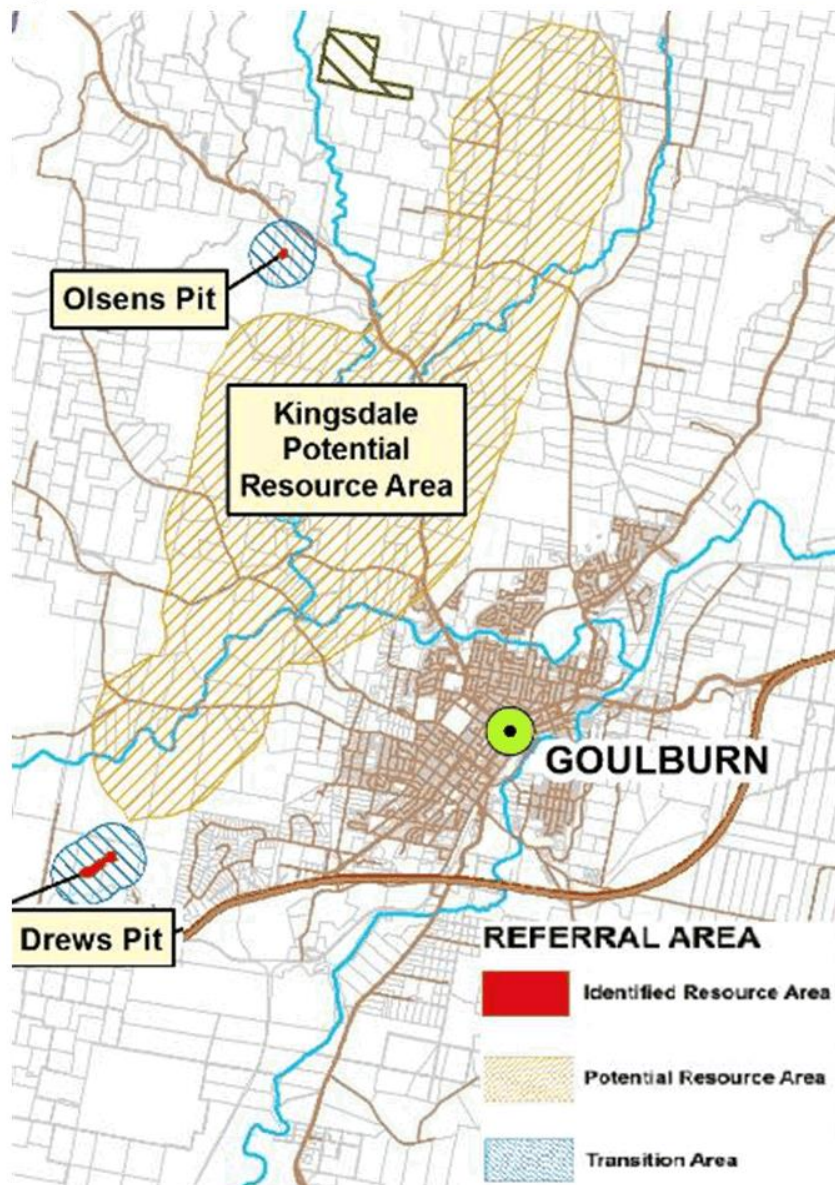
Mineral Resource Land

NSW Government Trade & Investment and the Geological Survey of NSW undertook a mineral resource audit of the Goulburn Mulwaree LGA in 2015 to provide advice on the location and significance of mineral and extractive resources within the LGA to assist in land use planning. The

Goulburn Mulwaree LGA is an important source of construction materials with the most notable hard rock aggregate and limestone operations being located in the Marulan area.

This relates to *Direction 1.3 – Mining, Petroleum Production and Extractive Industries* and *SEPP Mining, Petroleum Production and Extractive Industries (2007)*, which aims to provide for the proper management and development of resources and to facilitate the orderly economic use and development of land containing mineral, petroleum and extractive resources.

Figure 20 Goulburn Mulwaree Resource Audit Plan Extract - Goulburn



Source: NSW Government Trade & Investment and Geological Survey of NSW, 2015

The mineral resource audit identified three types of referral area as follows:

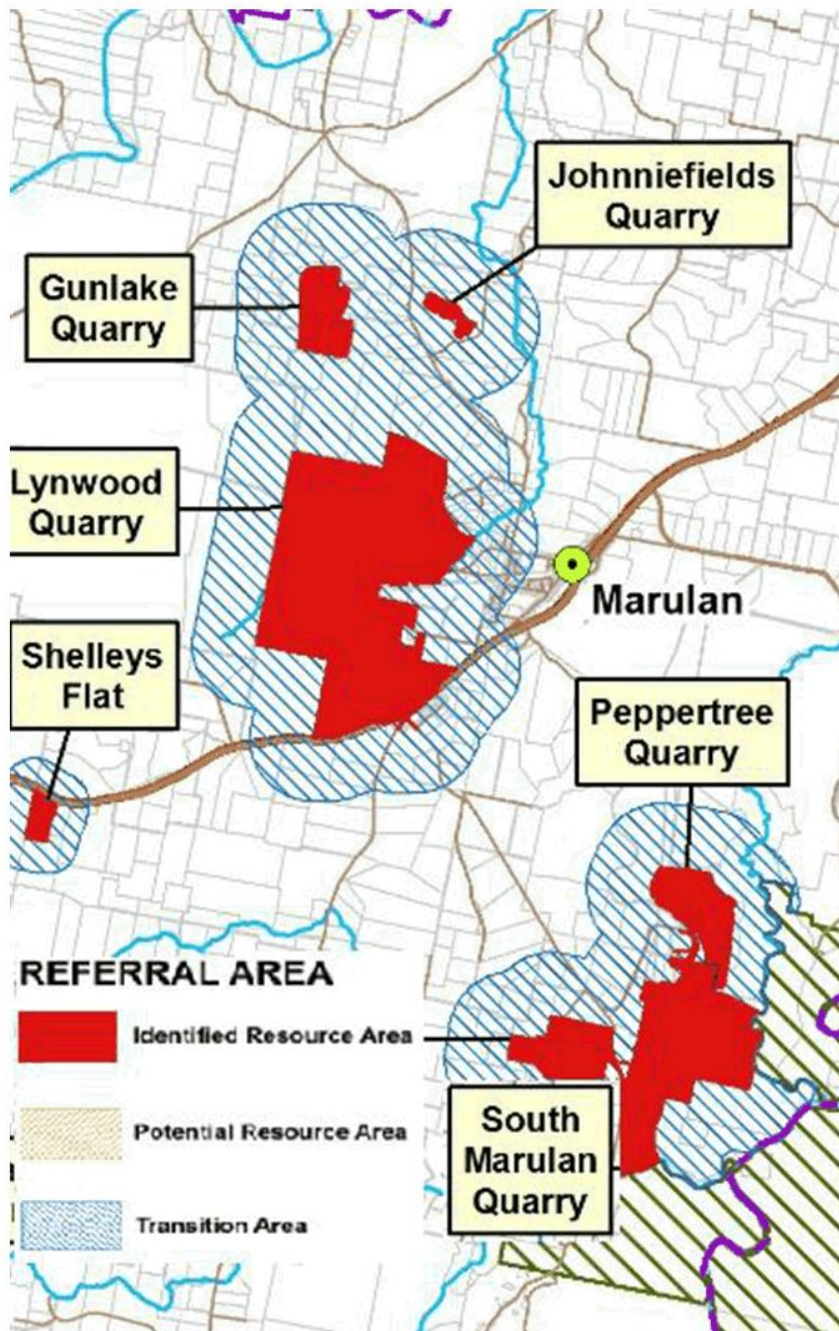
Identified Resource Area – containing active mineral, petroleum and/or extractive operations and/or identified resources.

Potential Resource Area – containing potential mineral, petroleum and/or extractive resources.

Transition Area – areas adjacent to identified resource areas.

Development within these areas could adversely affect or be affected by current and/or future resource development operations. Any proposed zoning changes or developments that may prohibit or restrict current or potential future operations in these referral areas should be referred to Resources & Energy Division of NSW Trade & Investment.

Figure 21: Goulburn Mulwaree Resource Audit Plan Extract - Marulan



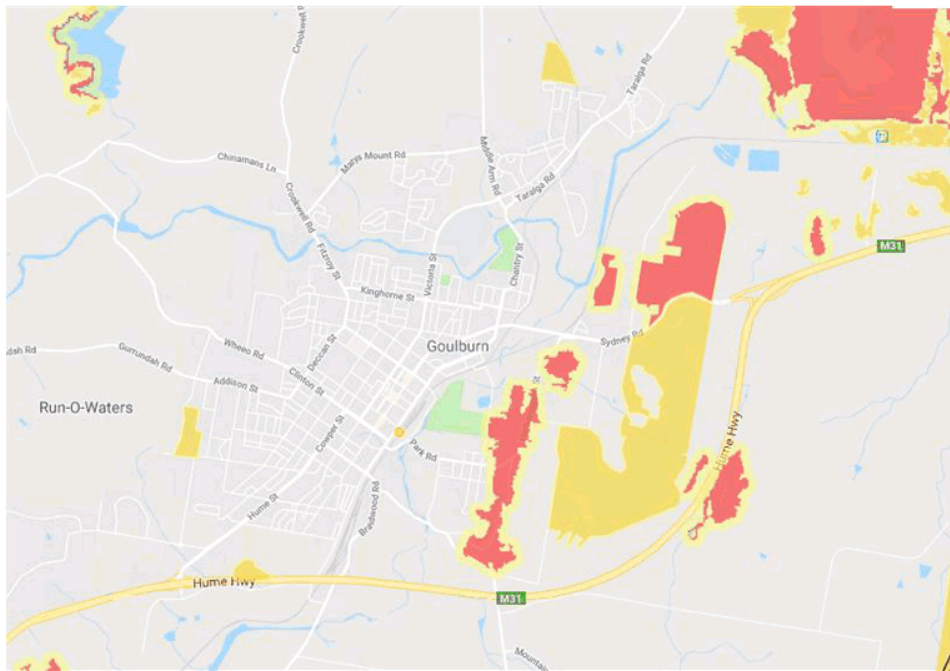
Source: NSW Government Trade & Investment and Geological Survey of NSW, 2015

Residential land use in the west of Marulan is highly constrained by the identified resource area and transition area associated with Lynwood Quarry.

Bushfire Hazard

In planning for the release of land for urban development purposes, it is important to take into account the potential threat from bushfire. Bushfire hazard can be a major constraint to future residential development given the likelihood for bushfire risks. The topography and overall slope of the land contributes to the level of bushfire hazard.

Figure 22 Bushfire Hazard Goulburn



Source: <https://www.planningportal.nsw.gov.au/> 2018

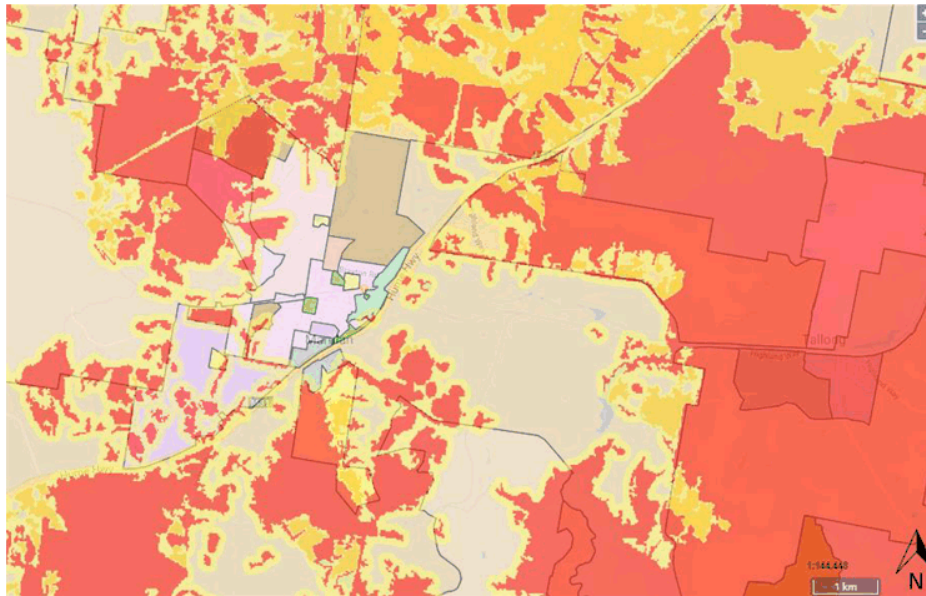
In this dataset, the bushfire hazard is limited to the vegetated areas to the south and east of Goulburn. These areas have been avoided in the Draft Housing Strategy. However, since the Draft Strategy was placed on public exhibition, the bushfire hazard mapping has been updated. It now essentially covers all land aside from urban areas.

Figure 23: Updated Bushfire Prone Land Goulburn

Source: NSW Planning Portal, Spatial Viewer. Hazard – Bushfire Prone Land, 2019

In Marulan, however, the urban area is surrounded on all fronts by high bushfire hazard. Both bushfire mapping datasets show that the development areas proposed in Marulan will need to provide a more thorough assessment of the hazard with the provision of asset protection zones and measures in mitigate the risk.

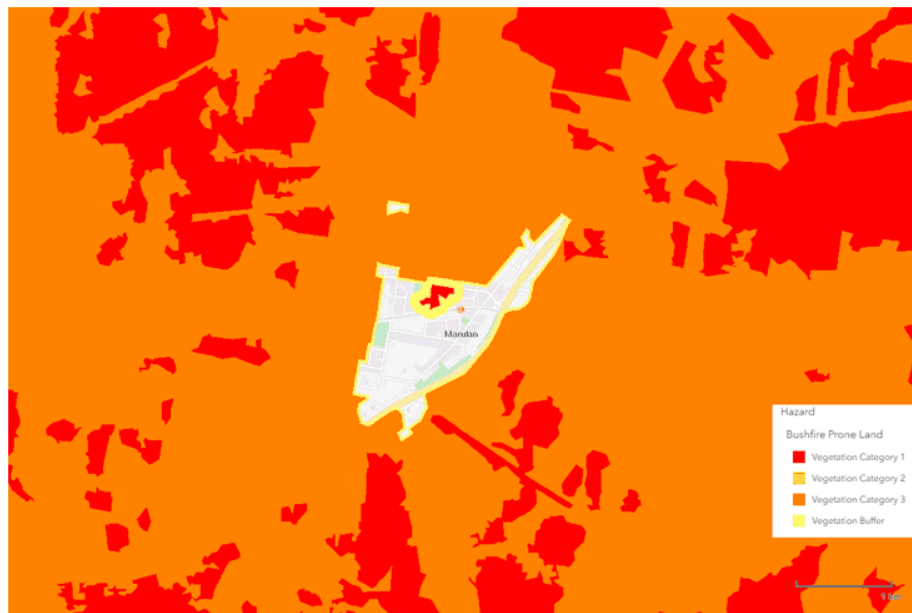
Figure 24 Bushfire Hazard Marulan



Source: <https://www.planningportal.nsw.gov.au/> 2018

The updated mapping for Marulan shows slight adjustments in the areas of high bushfire hazard (Vegetation Category 1, shown in red) with the rural grassed areas mapped orange as Vegetation Category 3.

Figure 25: Updated Bushfire Prone Land Marulan



Source: NSW Planning Portal, Spatial Viewer. Hazard – Bushfire Prone Land, 2019

Environmental Heritage considerations

Goulburn is recognised as an important meeting place that was inhabited, at first contact with Europeans, by the Gandangara and Ngunawal language groups. Within these larger groups, several distinct smaller communities existed⁵.

All areas indicated as having development potential should refer to the Goulburn Mulwaree LGA Aboriginal Heritage Study 2012 to understand site specific heritage matters. As with other detailed assessment requirements, site specific heritage assessments will need to be prepared prior to development of land.

Places of Aboriginal Significance are shown generally in **Figure 19** below.

Whether heritage is a constraint or opportunity depends on attitude⁶. In the Housing Strategy context this is particularly relevant to urban infill and redevelopment within Goulburn City Centre and Marulan Town Centre. As the first Inland City in Australia, Goulburn is known for its historic buildings which are seen as a point of difference and a tourist attraction. Many of these buildings are listed in Schedule 5 Environmental Heritage of the GM LEP 2009. Heritage Conservation Areas (HCA) also apply to various areas including the Goulburn City Centre (Refer **Figure 20**), to protect whole areas from inappropriate development which would impact the heritage elements such as architectural style of streetscapes and buildings, fences, trees and gardens. Heritage listed items and HCAs are noted in the individual precinct constraints analyses of this Housing Strategy.

The 1983 Heritage Study by Lester & Firth contains detailed mapping and precinct analysis which goes beyond the identification of individual items, detailing where contributory and non-contributory buildings are located. Given the lack of significant change in Goulburn since 1983 this provides a good overview as to the capacity of the various precincts for providing areas that can be modified.

In 2016 Council engaged heritage consultants Barker Ryan Stewart to undertake a comprehensive review and consolidation of Council's numerous existing heritage studies and bring the entire LGA under the auspices of one document⁷. This Draft Heritage Study Review was on public exhibition from 13 July to 8 September 2017. Recommendations from the review will inform amendments to Council's Local Environmental Plan (LEP) and Development Control Plan (DCP).

Goulburn Mulwaree Council provides an explanatory section on Heritage considerations on the website⁸ which should be referred to for guidance when considering development of or near heritage listed places.

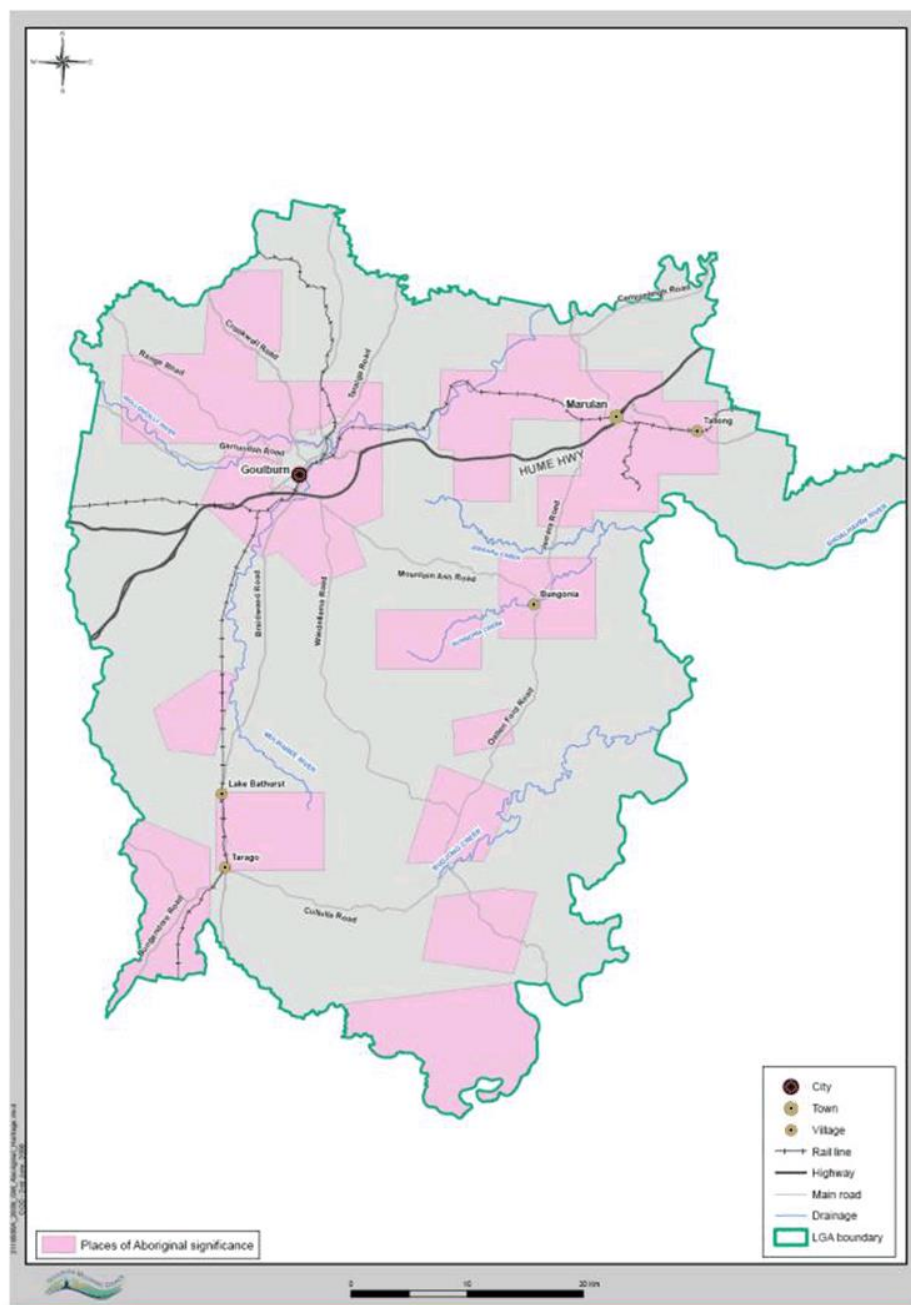
⁵ Goulburn Mulwaree Heritage Strategy 2015-18, GMC

⁶ Barker Ryan Stewart and Sue Rosen and Associates, 2017, 'Attitudinal Influences – Heritage Study Review' <https://yoursay.goulburn.nsw.gov.au/25206/documents/59038>

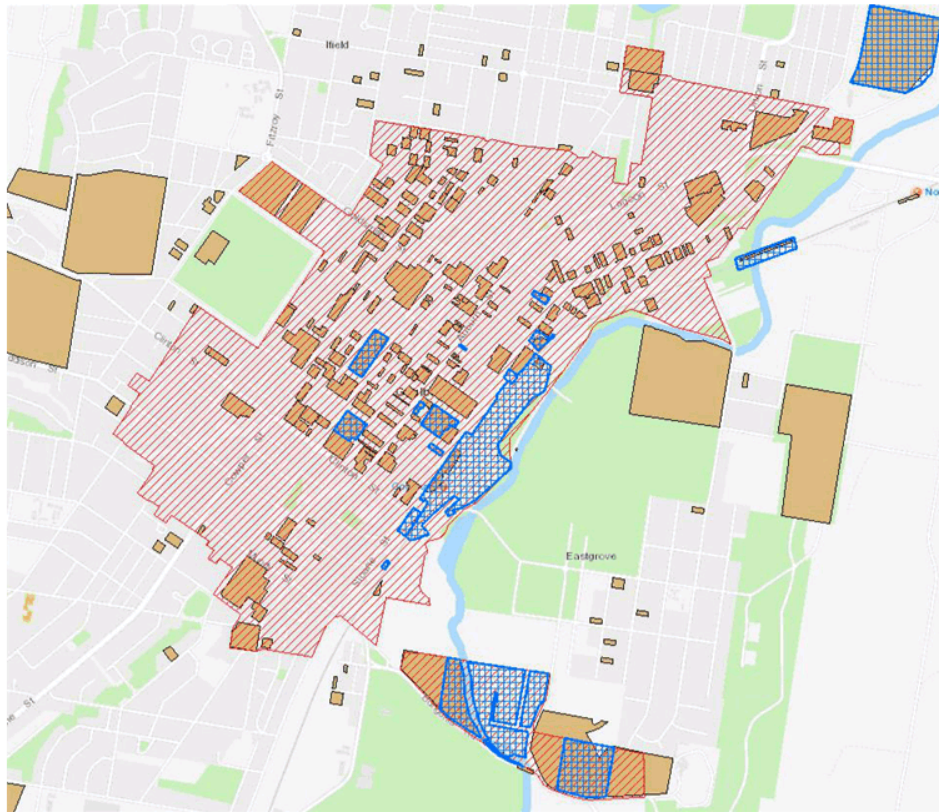
⁷ Barker Ryan Stewart and Sue Rosen and Associates, 2017, 'Objectives of Study Review – Heritage Study Review' <https://yoursay.goulburn.nsw.gov.au/25206/documents/59038>

⁸ GMC website, Heritage <https://www.goulburn.nsw.gov.au/Development/Heritage>

Figure 26 Places of Aboriginal Significance



Goulburn Mulwaree DCP 2009

Figure 27 Heritage Conservation Area

Source: <https://www.planningportal.nsw.gov.au/spatialviewer>

Industry, Infrastructure and Recreational Constraints

Various existing industry, infrastructure and recreational uses impose constraints to residential development throughout the Goulburn and Marulan areas.

Goulburn Rifle Range

The rifle range is located on the southern fringe of Goulburn in the Mt Gray East precinct, on Rifle Range Road. The range is home to four clubs, being The Goulburn Rifle Club, The Goulburn Clay Pigeon Club, The Goulburn Pistol Club and the Sporting Shooters Association of Australia Branch (SSAA). The range is also used by the Police, Corrective Services and Customs.

Land use conflict was experienced in 2018 when Council proposed landfill operations which fell within the northern extremity of the rifle range's 1832 metre danger area⁹. Residential development in the vicinity of the Rifle Range is not recommended.

⁹ Goulburn Post <https://www.goulburnpost.com.au/story/5704199/shooters-up-in-arms-over-rifle-range-closure/> and <https://www.goulburnpost.com.au/story/5709233/shooting-range-talks-partially-hit-the-mark/>

Goulburn Abattoir

Southern Meats Pty Ltd is a privately-owned export abattoir located at Mazamet Road, Goulburn. It produces halal killed, chilled and frozen Lamb and Mutton cuts, sheepskins, tallow, meat & bone meal and blood meal.

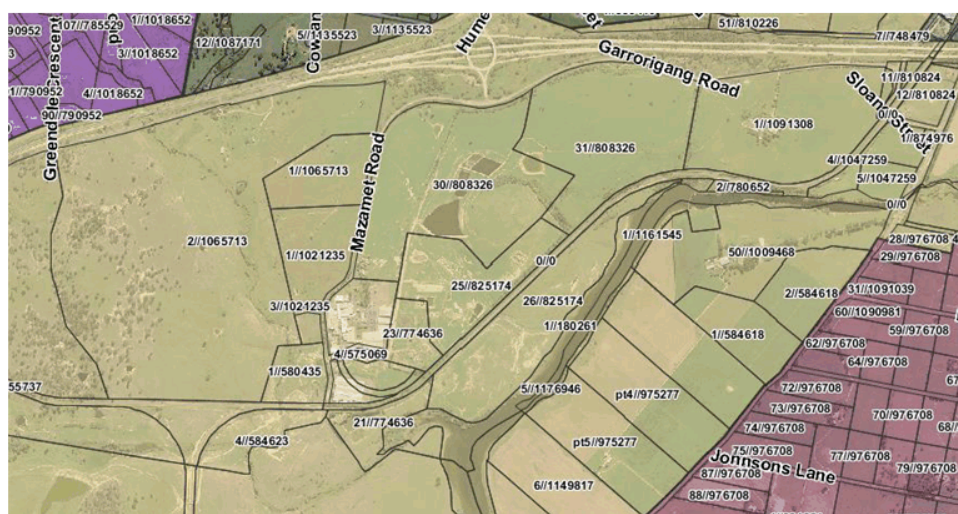
The abattoir is currently within an RU1 zone in a locality with a 100ha minimum allotment size as indicated on the extract below. The GM DCP 2009 currently requires a 1000m setback from an abattoir to a rural dwelling. The abattoir is a significant facility for Goulburn and its ongoing operation and expansion potential should not be impacted upon by development.

Council's *Employment Lands Strategy* 2016, identifies rural industries in Section 5.2.6 and Meat Processing in Section 5.2.7 as being a significant sector to the economy of NSW particularly in relation to wool and livestock for slaughter. The Strategy states:

"The rural industry in Goulburn Mulwaree LGA requires land for industrial uses including processing and packaging facilities; storage facilities and distribution facilities. The biggest rural industries in the LGA are not of a scale to require significant additional processing facilities but may have some needs that can be met by working closely with the industry. The most significant rural industry within Goulburn Mulwaree which requires employment lands is meat processing".

The current meat processing industry in the LGA is focused on cattle and sheep (providing 60% of the NSW supply), however as identified in a State Significant Development (SSD) application for a proposed poultry processing plant (near Common St/Sinclair Road), there is a growing demand outside of Sydney for poultry processing also. As also stated in the Strategy (p.46) there is an increasing demand from China for protein. This is positive for the potential for increasing meat processing in the LGA.

Figure 28 Current RU1 zoning of abattoir



If a 1000m buffer is applied to the main abattoir area, the area affected is still contained within the 100ha minim allotment size area as shown in **Figure 22**.

Figure 29 1000m Abattoir buffer as per DCP

This suggests that the area south of the Hume Highway and to the west of Braidwood Road (Abattoir Precinct) should remain as currently zoned and with the same minimum allotment size, as it is unsuitable for increased residential density whether for urban or rural residential. This would allow some growth of the abattoir without increasing the impact on residential land use.

Goulburn Airport

The operation of Goulburn Airport south of the Hume Highway is a constraint due to its potential for expansion of air services and/or development of a related business park. A feasibility study into NSW regional airports will be undertaken by TfNSW in the near future (late 2019).

The Australian Noise Exposure Concept (ANEC) and ANEF contours are unknown. State strategic documents advise against sterilising transport routes and infrastructure it is recommended that any residential development in this area (Mountain Ash and Brisbane Grove precincts) consider the potential impact of the Airport.

Wakefield Park

The Wakefield Park Raceway is located at a relatively low elevation in Tirrannaville. A combination of geography and atmospheric conditions creates an inversion layer during certain conditions which allows sound to carry long distances. This means gear changes can sometimes be clearly heard within Goulburn CBD.

Council is engaged in negotiations with the operators of Wakefield Park around possible noise mitigation measures, however, even if controls such as use of mufflers are introduced, the raceway is likely to continue to generate significant noise into the future. This imposes a

constraint on residential land use in the precincts south of the Hume Highway as any expansion would introduce land use conflict.

NSW Police Driver Training

Located at Dallas Tidyman Drive, Goulburn (Narrangarril East precinct) this facility has the potential for land use conflicts related to noise if residential dwellings were located nearby. An assessment of noise levels from the training facility on the former sewerage irrigation site at Taralga Road (Kenmore precinct) would need to be undertaken when assessing the site's suitability for residential use.

Goulburn Speedway and Motor Cycle Club (Motorcross)

Goulburn Speedway is a clay racetrack located on the eastern side of Mt Gray in the Mt Gray East precinct. Goulburn Motor Cycle Club is a motorcross/dirtbike club and racetrack just south of the speedway. Both facilities are accessed via Speedway Road. Residential land use is not recommended in the vicinity of these facilities due to land use conflict related to noise. Additionally, the Hume Highway approach to Goulburn from the north is of rural character which should be preserved. No changes to the current zoning east of Mt Gray or the Hume Highway are proposed.

Sewerage Treatment Plant – Goulburn

Council have recently completed an upgrade to the Goulburn sewerage treatment plant (STP). The new system will provide recycled water for maintaining Goulburn's green spaces and no longer requires the maturation ponds and irrigation areas at Murray's Flat, Gorman Road and Kenmore.

Council's STP licence is conditioned that no odour is to extend beyond the property boundary, however, it is recognised that there is the potential for periodic upsets in the process that could result in odour generated in the vicinity of the STP. Council advised that since the STP has become fully operational no odour complaints have been made.

When considering the potential for additional development in the Gorman Road area, odour issues from the new STP are unlikely to pose a substantial constraint if only periodic odour incidents occur.

Figure 30 Sewerage Treatment Plant- Goulburn

Source: Council 2019

High Pressure Gas Pipeline

The Sydney to Moomba natural gas pipeline runs to the north of Goulburn, through Marulan and on to Sydney. It supplies natural gas to towns within the Goulburn Mulwaree LGA and is operated by APA Group.

Planning Circular PS 18-010¹⁰ provides advice regarding development in the vicinity of high pressure gas pipelines to ensure that risks to people, property and the pipelines are within acceptable levels.

¹⁰ NSW Government Planning Circular 18-010 <https://www.planning.nsw.gov.au/-/media/Files/DPE/Circulars/planning-circular-18-010-act-and-regulation-changes-2018-10-26.pdf?la=en> accessed July 2019

Safety and Risk Assessment

While a serious failure of a pipeline is very unlikely, the consequence of such a failure could have serious implications for life, property, the environment and the State's economy.

High pressure pipelines are designed, constructed, tested, operated and maintained in accordance with Australian Standard AS 2885 and licenced under the Pipelines Act 1967. The Pipelines Regulation 2013 also ensures that licensed pipeline are designed, constructed, maintained and operated in a safe and reliable manner. Under this Regulation, all pipeline operators must develop and implement a Pipeline Management Plan, which is used to monitor the ongoing performance of the pipeline operator.

A risk assessment for any proposed sensitive use near the pipeline is to be performed by a suitably qualified professional. A risk assessment must demonstrate that the development will comply with the risk criteria for land use safety planning published in *Hazardous Industry Planning Advisory Paper (HIPAP) No. 4 – Risk Criteria for Land Use Safety Planning*. This assessment is the responsibility of the applicant and must be undertaken in consultation with the pipeline operator and submitted with the development application.

In assessing the tolerability of risk from high pressure pipelines, both qualitative and quantitative aspects need to be considered. Any quantitative (numeric) risk assessment should be consistent with the principles published in *Hazardous Industry Planning Advisory Paper No. 6 – Hazard Analysis*.

Source: Planning Circular 18-010, NSW Government

The presence of the gas pipeline is not a prohibition on low density residential development; however, it is understood that a 675m buffer (on either side of the pipeline easement) is calculated based on the Australian Standard (AS) which excludes certain sensitive uses (for evacuation reasons). Under Clause 66 of the Infrastructure SEPP, such uses include high density residential, commercial or sensitive uses such as hospitals, schools, child care and aged care facilities. Consent authorities should consider these development applications more carefully as they may introduce a higher or more vulnerable population near the pipelines¹¹. The Infrastructure SEPP also includes notification requirements and requirements to consider potential safety risks related to development near high pressure pipelines. These provisions were recently expanded in amendments made to the SEPP on 31 August 2018¹².

It is proposed that the buffer area has potential for use as a linear park with a shared walking and cycling path linking the Wollondilly River path and potentially the Goulburn-Crookwell rail corridor (rail trail) to form an active travel network as Goulburn expands into the northern fringe. A road link parallel to the pipeline could also potentially be located within the buffer corridor.

The pipeline poses a significant development constraint to the Sooley, Narrangarril West and Narrangarril East precincts with limited perpendicular crossings and no big trees allowed in the vicinity of the pipeline. Furthermore, APA Group will not allow the use of the easement for a linear east – west road link across the northern urban expansion area (proposed in the Draft Housing Strategy). It is therefore proposed that urban development in these precincts be limited to the areas south of the pipeline in the short and medium term. Although the pipeline also

¹¹ NSW Government Planning Circular 18-010 <https://www.planning.nsw.gov.au/-/media/Files/DPE/Circulars/planning-circular-18-010-act-and-regulation-changes-2018-10-26.pdf?la=en> accessed July 2019

¹² Ibid.

bisects the Kenmore precinct, the areas impacted are also flood constrained and considered unsuitable for urban development.

Main Electricity Easements

Restrictions on what activities are allowed within an electricity easement or near electricity infrastructure apply.¹³ Generally, agriculture, recreation activities, gardening, vehicle parking, storage and minor structures are permissible, provided that activities do not exceed height limits.

Developments such as the construction of pergolas & verandas, outbuildings, sporting facilities, fencing & yards, swimming pools, irrigation equipment, utilities and excavation are generally controlled in electricity easements or near electricity infrastructure. Controlled activities may be permitted with written approval.

Typically, prohibited activities include:

- » The construction of houses, buildings, or other substantial structures
- » The installation of fixed plant or equipment
- » The storage of flammable materials or explosives
- » The storage of garbage materials or fallen timber
- » Planting of any vegetation which exceeds 4.0 metres in height
- » Any obstructions placed within 5.0 metres of any part of a powerline, pole or supporting guy or 10.0 metres of a steel structure
- » Flying of kites or model aircraft.

Main Electricity transmission lines are noted on the constraints maps for each precinct.

Quarrying and Hazardous Industry

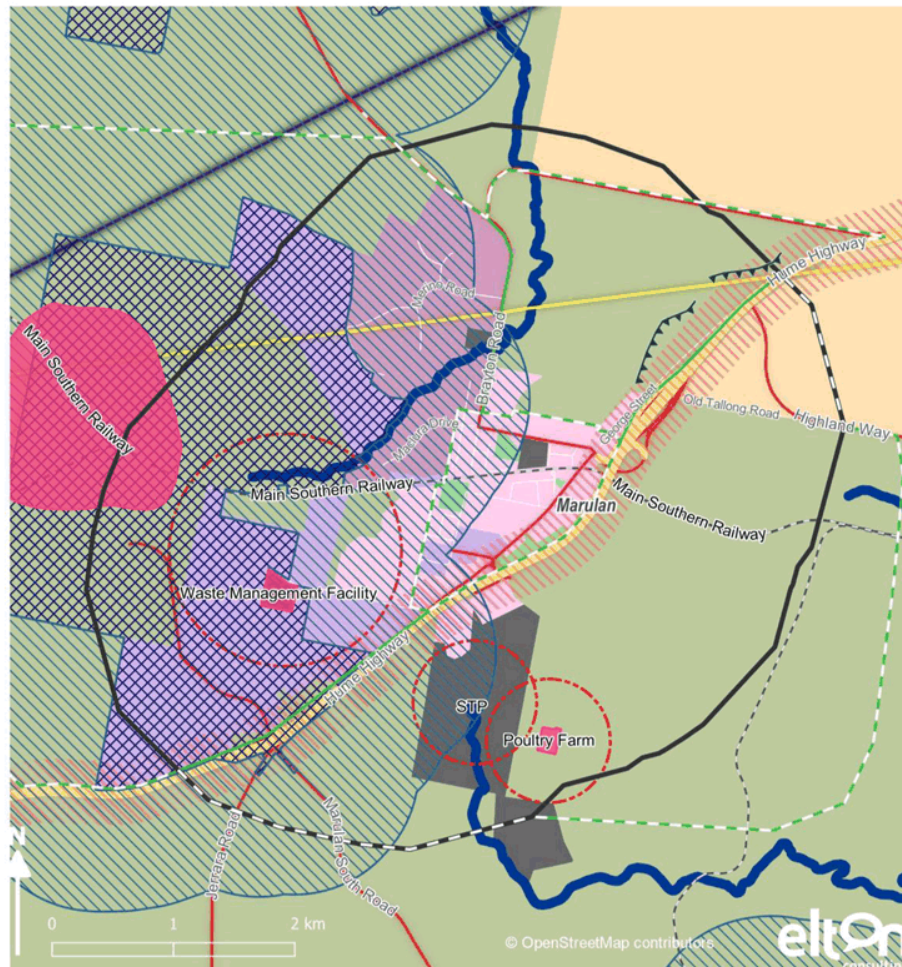
Major quarries, hazardous industry and offensive industry/infrastructure operate in close proximity to the township of Marulan and pose significant constraints to residential expansion. Land use constraint buffers are shown on the Marulan constraints map below and primarily impact the Marulan West and south west of the Marulan South precinct analyses. Land within land use constraint buffer zones is not suitable for residential dwellings.

¹³ Essential Energy 'Living with Electricity Easements and Infrastructure'
<https://www.essentialenergy.com.au/-/media/Project/EssentialEnergy/Website/Files/Our-Network/LivingWithEasements.pdf?la=en&hash=F547F35E5DCA13F30AC7552B9969029BEF3C72A4> accessed July 2019

Constraints Maps

Combined Constraints Maps have been prepared for both Marulan and Goulburn and have been used as the basis for determining land suitability. These Maps are illustrated below.

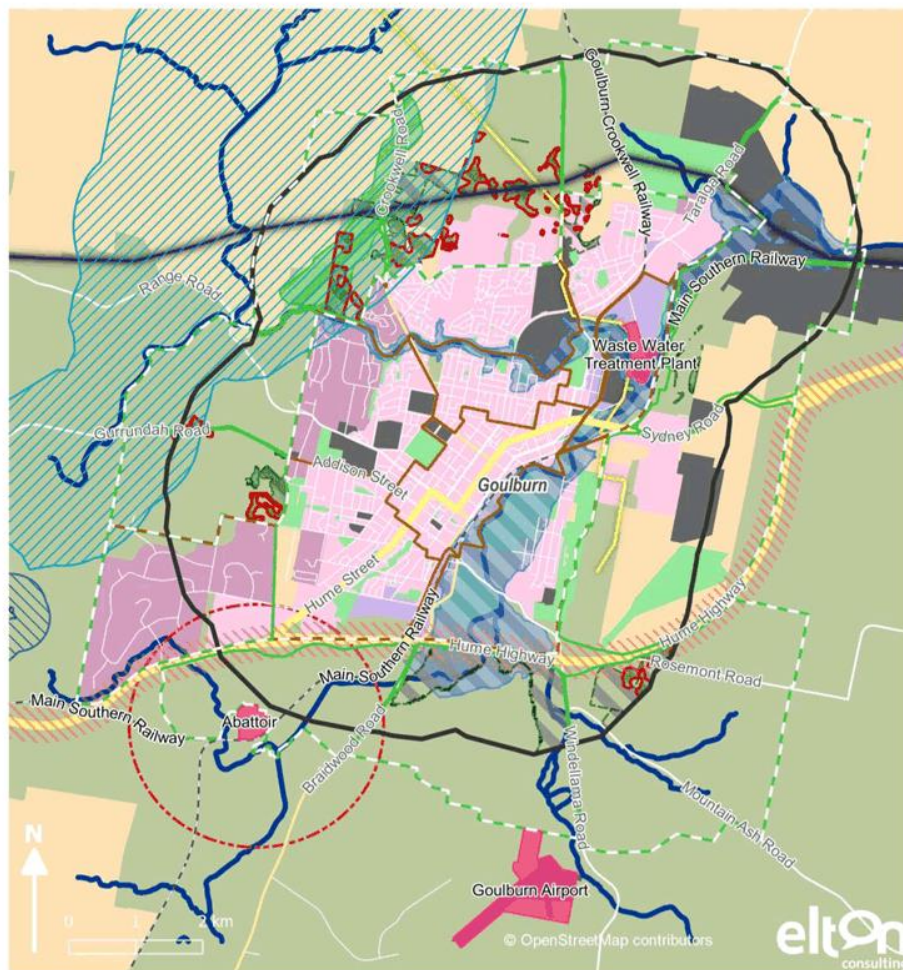
Figure 31 Marulan Constraints Map



Legend

Land Zoning	Constraints buffers	Gas pipeline
Urban area	Land use constraints	Mines and quarries
Non-urban environmental protection	Riparian buffers	Transition Area
Urban area	4th order (40m)	Ridge line
Rural residential	250m from Hume Highway	
Public Recreation	Electricity transmission line	
Rural area		
Infrastructure		

Figure 32 Goulburn Constraints



Legend

Land Zoning	Constraints buffers	ELA Vegetation	Mines and quarries
Urban area	Land use constraints	TEC	Transition Area
Non-urban environmental protection	Flooding	Other Vegetation (ELA)	
Urban area	Riparian buffers	Validated (ELA)	
Rural residential	4th order (40m)	250m from Hume Highway	
Public Recreation	Strategic agricultural land	Electricity transmission line	
Rural area		Gas pipeline	
Infrastructure			

E Biodiversity Constraints (ELA)

Draft Urban and Fringe Housing Strategy

Goulburn Mulwaree Urban Fringe Housing Strategy – Constraints Analysis (Revised Sites)

Area of interest

The area of interest consists of the lands within a 5km radius of Goulburn and Marulan. A number of sites were identified and provided associated the urban fringe as lands with potential for development (Figures 1 and 2). Each site was referred to with a unique site identifier.

Desktop constraints based on the available data were assessed for each of these sites.

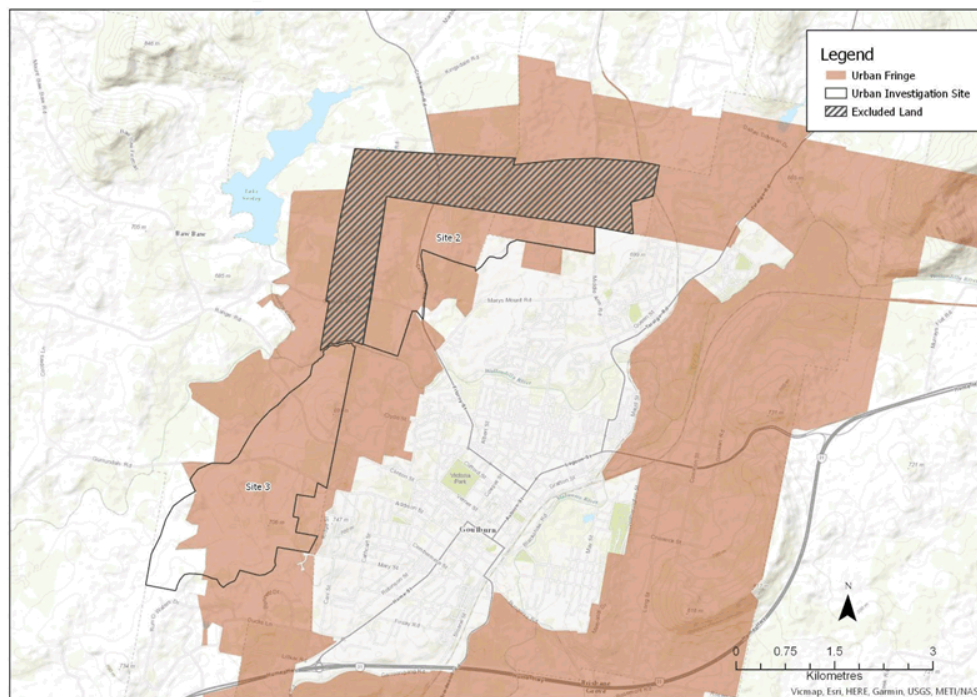


Figure 1: Goulburn study area sites

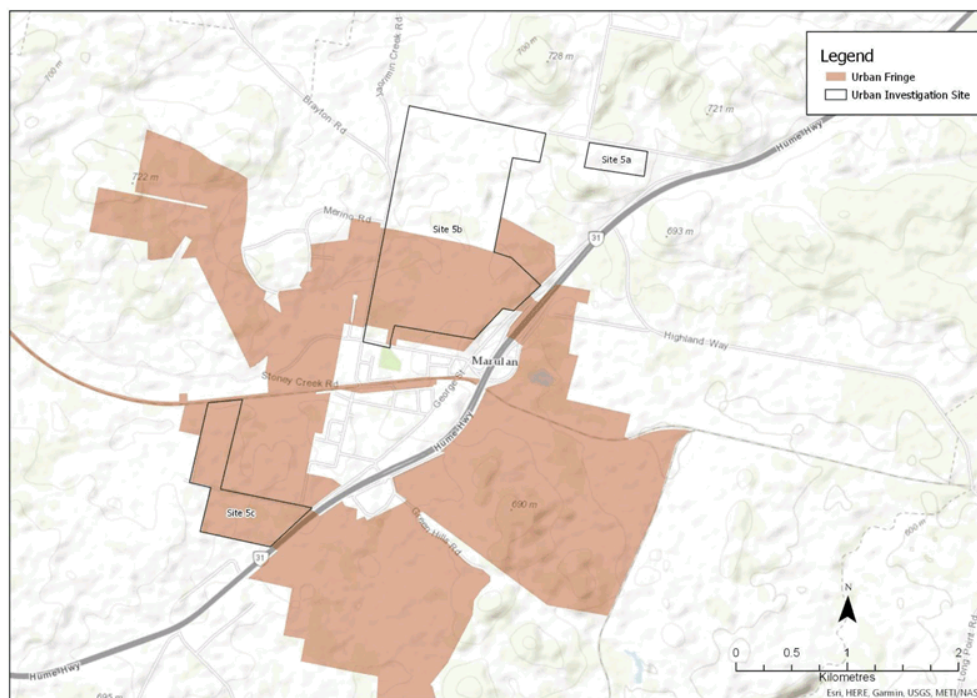


Figure 2: Marulan study area sites

Data

A number of key data sets were identified to assist and support analysis for the Strategy. Data sets included:

Theme	Data	Source	Usage
Biodiversity	Threatened species locations (State/Commonwealth)	Atlas of NSW Wildlife/BioNet (OEH) EPBC Protected matters search (DEE)	Identified recorded threatened species within 5km of study area sites Protected matters search tool for matters of National Environmental Significance within a 5km radius of Goulburn and Marulan
Biodiversity	Vegetation type mapping Threatened ecological communities (State/Commonwealth)	Elton / SELLS	Identified candidate TECs across study area sites
Biodiversity	Conservation Significance Assessment (CSA) mapping	Elton	Identified areas of High / Moderate / Low conservation value by site
Bushfire	Bushfire Prone Land Mapping	RFS / Council	not available
Riparian	Drainage	Strahler classified drainage (LPI)	Buffered stream order according to Office of Water

Goulburn Mulwaree Urban Fringe Housing Strategy – Biodiversity Constraints

Theme	Data	Source	Usage
	Strahler stream order classification		DPI riparian corridor widths for Riparian buffers
Conservation	Reserves (State and Council lands) Open Space and conservation / environmental land	NPWS Estate (OEH) LEP land zoning (DPE)	
Conservation	High Environmental Value (HEV) lands	OEH	Identified areas of HEV by site
Conservation	State and Regional Biodiversity Corridors (South East Tablelands)	OEH	
Vulnerable lands	Steep slopes or highly erodible	State-wide dataset (OEH)	Land with slope > 18 degrees identified within the study area as high erosion risk
Flood Risk	Flood prone lands	Council	Land prone to flooding within the study area as high risk
Agricultural	Land classification Land use	Land and soil capability (OEH) Land use mapping (DoAWR)	
Sites	Investigation Areas	Elton	Study area to base constraints assessment

Biodiversity Values

Threatened Ecological Communities (TECs)

Two TECs are mapped within the study area sites, they are:

- White Box-Yellow Box-Blakely's Red Gum Grassy Woodland and Derived Native Grassland (Listed under the BCA and EPBC) – 20 ha
- Natural Temperate Grasslands of the Southern Tablelands of NSW and the ACT (Listed under EPBC) – 19 ha

The breakdown of the amount of TECs across the study sites is shown in Tables 1 and 2 and mapped in Figures 3 and 4.

More detailed vegetation type mapping and an area breakdown for each of the study area sites is provided in Appendix A.

Table 1: Area of TECs within the study area sites – Goulburn

Study site ID	Vegetation (ha)			Site (ha)	% TEC of Site	% TEC of Vegetation
	TEC	Other Vegetation	Total Vegetation			
Excluded	8.84	103.08	111.92	527.84	2%	8%
Site 2	5.64	82.50	88.13	313.66	2%	6%
Site 3	12.62	241.02	253.63	530.23	2%	5%
Total	27.09	426.59	453.68	1371.73		6%

Table 2: Area of TECs within the study area sites – Marulan

Study site ID	Vegetation (ha)			Site (ha)	% TEC of Site	% TEC of Vegetation
	TEC	Other Vegetation	Total Vegetation			
Site 5a	-	-	-	12.18	-	-
Site 5b	4.05	0.11	4.16	226.34	2%	97%
Site 5c	7.85	0.16	8.00	55.39	14%	98%
Total	11.90	0.27	12.17	293.91		98%

TECs exist in both of the sites identified for investigation in Goulburn's urban fringe. For all sites, TECs cover approximately 2% of each site. The Site with the greatest amount of TEC is Site 3, approximately twice the amount of Site 2. Nearly 9ha of TEC also exists in part of Site 2 that is excluded from investigation.

Two of the three sites in the Marulan urban fringe contain vegetation, the majority (98%) of which is classed as TEC. Approximately 14% of Site 5c is made up of TECs, with a smaller proportion (2%) of TECs on Site 5b.

Goulburn Mulwaree Urban Fringe Housing Strategy – Biodiversity Constraints

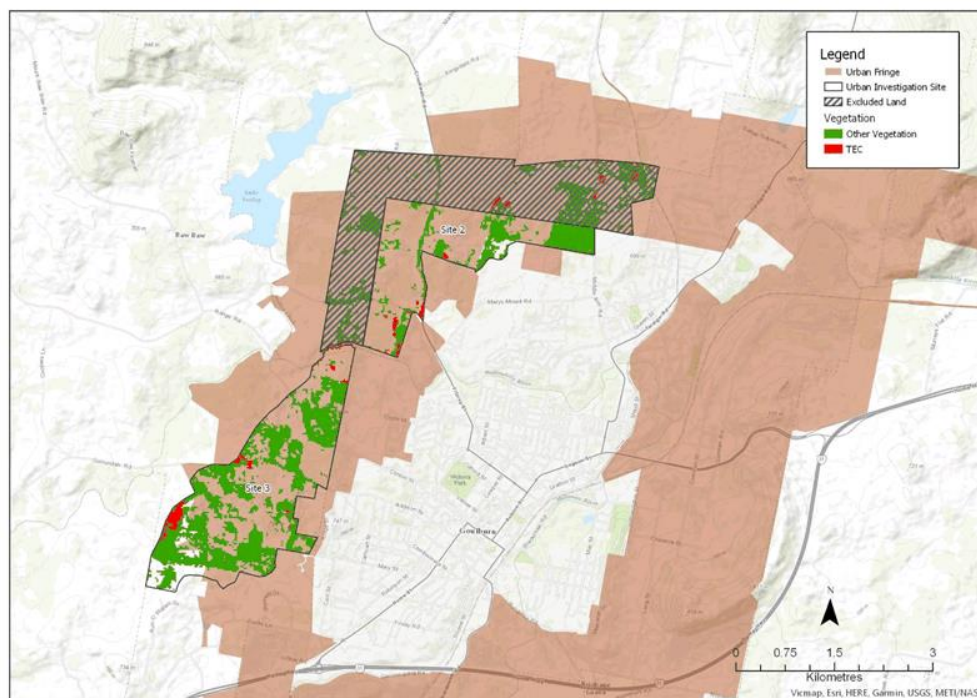


Figure 3: Goulburn TECs

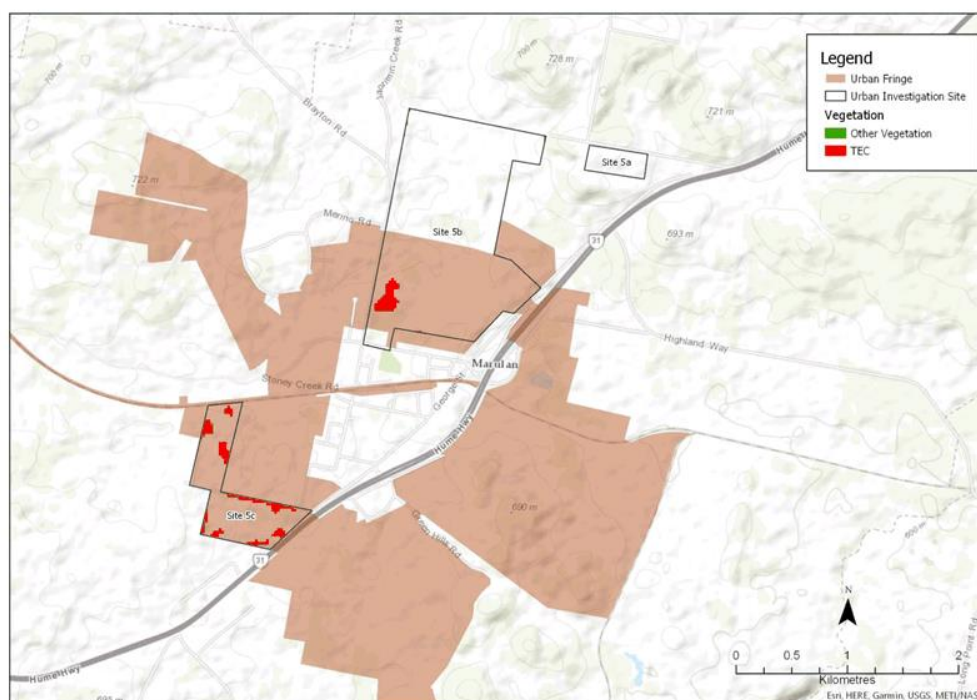


Figure 4: Marulan TECs

Threatened Species

A search of the Atlas of NSW Wildlife (BioNet) was carried out in October 2018 to identify records of threatened flora and fauna within 5km of the study area sites.

Threatened fauna

A total of 25 fauna species listed under the BC Act, including 4 species listed under the EPBC Act, were identified within 5km of the study sites (Table 3).

While no threatened species were recorded within the Goulburn study area Sites, one threatened fauna species (Gang-gang Cockatoo) was recorded immediately adjacent to the excluded area of Site 2 in the Goulburn urban fringe (Figure 5).

8 fauna species (6 birds and 2 mammals) have been recorded at the north western edge of Site 5b, in the Marulan urban fringe (Figure 6).

Threatened species recorded within Site 5b were:

- Little Eagle
- Little Lorikeet
- Speckled Warbler
- Varied Sittella
- Dusky Woodswallow
- Scarlet Robin
- Eastern False Pipistrelle
- Eastern Bentwing-bat

Table 3: Recorded threatened fauna species recorded within 5km of study area sites

Class	Scientific name	Common Name	BC Act	EPBC Act	Recorded number of individuals*
Aves	<i>Artamus cyanopterus cyanopterus</i>	Dusky Woodswallow	V	-	20
Aves	<i>Callocephalon fimbriatum</i>	Gang-gang Cockatoo	V	-	14
Aves	<i>Calyptorhynchus lathami</i>	Glossy Black-Cockatoo	V	-	7
Aves	<i>Chthonicola sagittata</i>	Speckled Warbler	V	-	7
Aves	<i>Climacteris picumnus victoriae</i>	Brown Treecreeper (eastern subspecies)	V	-	1
Aves	<i>Daphoenositta chrysoptera</i>	Varied Sittella	V	-	2
Aves	<i>Ephippiorhynchus asiaticus</i>	Black-necked Stork	E	-	1
Aves	<i>Falco subniger</i>	Black Falcon	V	-	0
Aves	<i>Glossopsitta pusilla</i>	Little Lorikeet	V	-	11
Aves	<i>Hieraaetus morphnoides</i>	Little Eagle	V	-	2
Aves	<i>Lophoictinia isura</i>	Square-tailed Kite	V	-	0

Goulburn Mulwaree Urban Fringe Housing Strategy – Biodiversity Constraints

Class	Scientific name	Common Name	BC Act	EPBC Act	Recorded number of individuals*
Aves	<i>Melanodryas cucullata cucullata</i>	Hooded Robin (south-eastern form)	V	-	0
Aves	<i>Ninox strenua</i>	Powerful Owl	V	-	1
Aves	<i>Petroica boodang</i>	Scarlet Robin	V	-	1
Aves	<i>Petroica phoenicea</i>	Flame Robin	V	-	0
Aves	<i>Stagonopleura guttata</i>	Diamond Firetail	V	-	2
Mammalia	<i>Chalinolobus dwyeri</i>	Large-eared Pied Bat	V	V	1
Mammalia	<i>Dasyurus maculatus</i>	Spotted-tailed Quoll	V	E	0
Mammalia	<i>Falsistrellus tasmaniensis</i>	Eastern False Pipistrelle	V	-	0
Mammalia	<i>Miniopterus schreibersii oceanensis</i>	Eastern Bentwing-bat	V	-	4
Mammalia	<i>Mormopterus norfolkensis</i>	Eastern Freetail-bat	V	-	0
Mammalia	<i>Petaurus norfolcensis</i>	Squirrel Glider	V	-	2
Mammalia	<i>Phascolarctos cinereus</i>	Koala	V	V	1
Mammalia	<i>Pteropus poliocephalus</i>	Grey-headed Flying-fox	V	V	10
Mammalia	<i>Saccolaimus flaviventris</i>	Yellow-bellied Sheath-tail-bat	V	-	1

E – Endangered, V – Vulnerable

*A value of 0 denotes that while the species has been recorded, numbers of individuals were not noted

Threatened flora

A total of 6 flora species listed under the BC Act, including 4 species listed under the EPBC Act were identified within 5km of the study area sites (Table 4).

No threatened flora species have been recorded within the study area sites.

Table 4: Recorded threatened flora species within 5km of the study area sites

Scientific name	Common Name	BC Act	EPBC Act	Recorded number of individuals*
<i>Diuris aequalis</i>	Buttercup Doubletail	E	V	0
<i>Eucalyptus aggregata</i>	Black Gum	V	V	0
<i>Eucalyptus macarthurii</i>	Paddys River Box, Camden Woollybutt	E	E	0
<i>Pultenaea pedunculata</i>	Matted Bush-pea	E	-	0
<i>Rutidosis leptorrhynchoides</i>	Button Wrinklewort	E	E	0
<i>Solanum celatum</i>		E	-	6

E – Endangered, V – Vulnerable

*A value of 0 denotes that while the species has been recorded, numbers of individuals have not been recorded

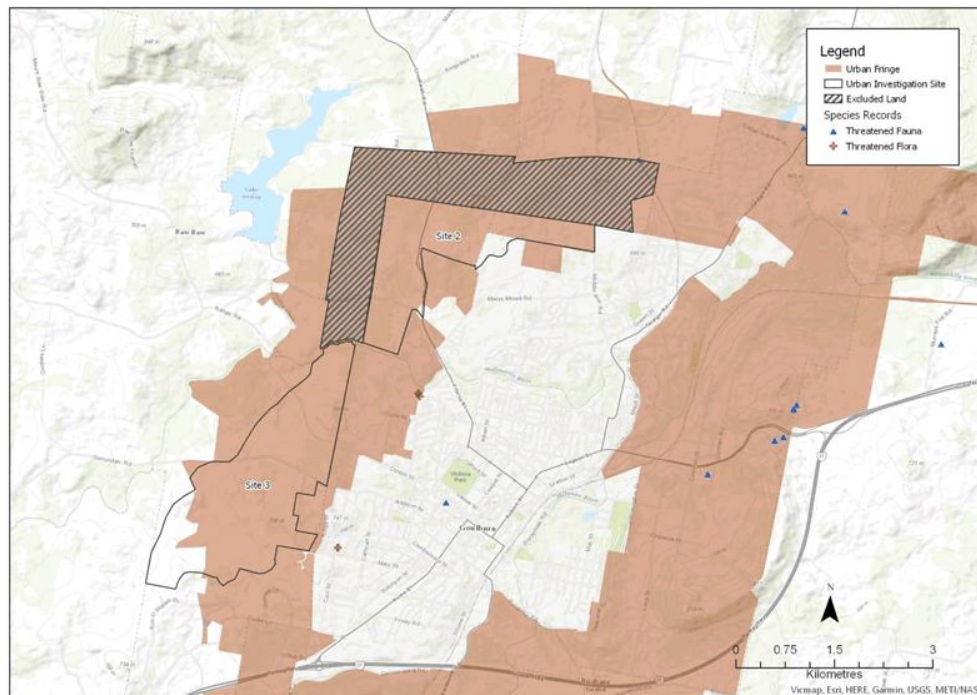


Figure 5: Goulburn - recorded threatened species (Atlas of NSW Wildlife October 2018)

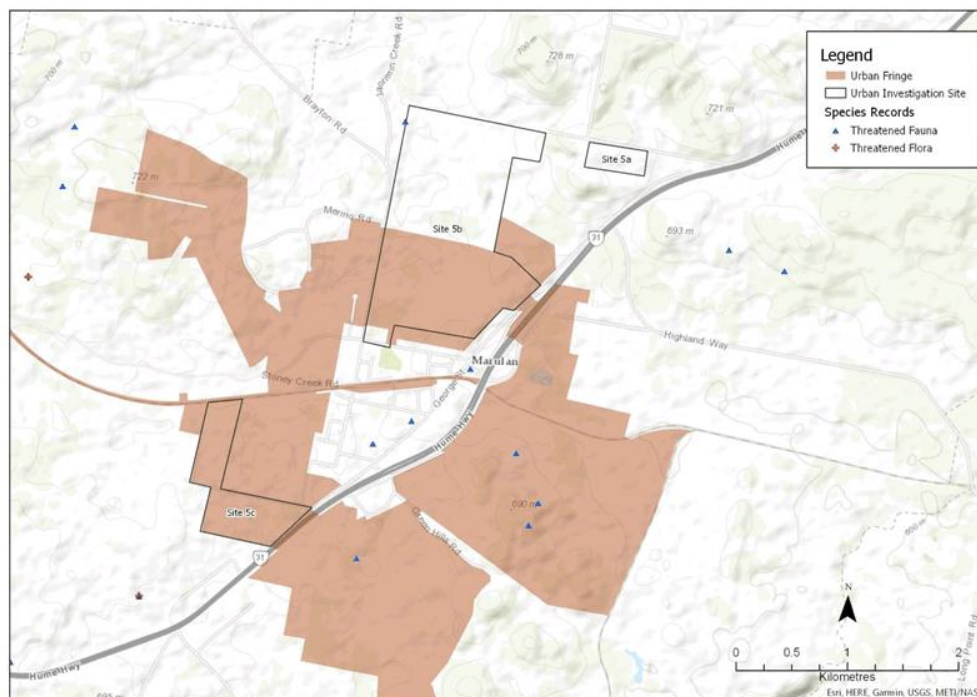


Figure 6: Marulan - recorded threatened species (Atlas of NSW Wildlife October 2018)

Matters of National Environmental Significance (MNES)

An EPBC Act Protected Matters Report (DEE 2018) was generated on 8 November 2018 based on a 5 km buffer around the town centres of Goulburn and Marulan.

The following matters have been identified as being likely to occur or known to occur in the proximity of the study area sites:

- 3 listed threatened ecological communities (TECs) (2 known to occur)
- 22 listed threatened fauna species (4 known to occur)
- 14 listed threatened flora species (4 known to occur)
- 13 listed migratory species

Separate protected matters reports including the details of all identified MNES for Goulburn and Marulan were prepared.

Conservation values

Conservation value information was summarised by each study area site. Conservation values have been broken down into High, Moderate and Low. Areas of High or Moderate conservation value generally include the greatest constraints to development, making up areas of core or support for core habitat. Mapping has been prepared by Council and was obtained via Elton.

A breakdown of the proportion of conservation value by study area site has been summarised in Table 5 and Figure 7 for the Goulburn urban fringe; and Table 6 and Figure 8 for the Marulan urban fringe.

Table 5: Goulburn study area sites conservation values

Study Site ID	Conservation Value (ha)				% of Site with Higher Constraints*
	High	Moderate	Low	Total	
Excluded	38.38	69.47	419.99	527.84	20%
Site 2	12.94	70.82	229.90	313.66	27%
Site 3	255.46	54.59	220.19	530.23	58%
Total	306.77	194.87	870.09	1,371.73	

* Higher constraints = High + Moderate conservation values

Approximately 58% of Site 3 in the Goulburn urban fringe, is mapped with higher constraints (mostly High conservation values), across the site. Site 2 includes higher constraints over 27% of the site, however, this is mostly made up of Moderate conservation values scattered in patches across the Site (Figure 7).

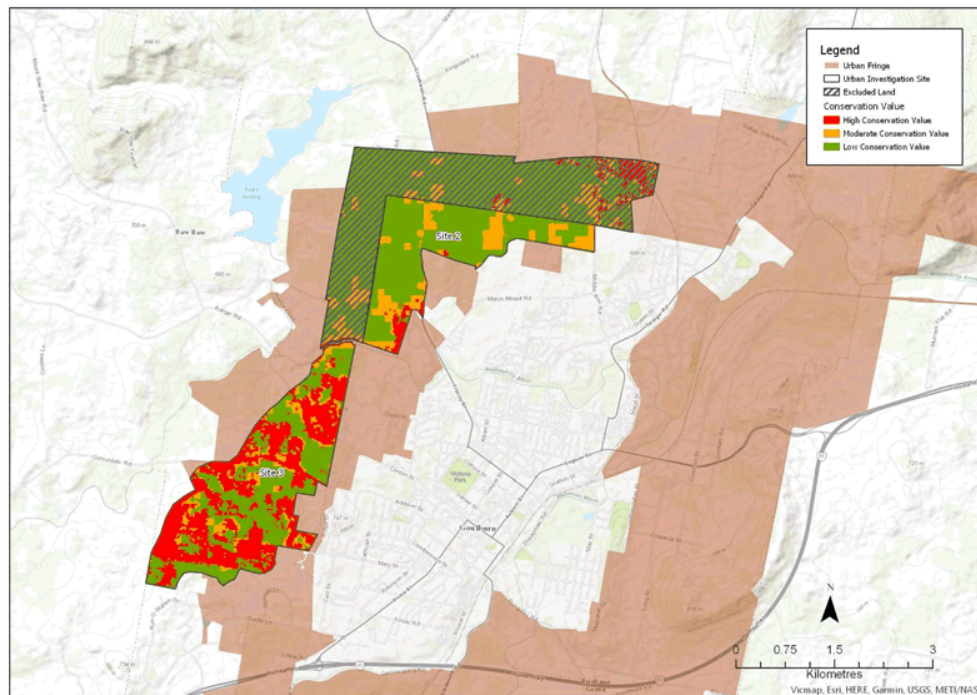


Figure 7: Goulburn conservation values

Table 6: Marulan study area sites conservation values

Study Site ID	Conservation Value (ha)			Total	% of Site with Higher Constraints*
	High	Moderate	Low		
Site 5a	-	-	12.18	12.18	-
Site 5b	11.89	-	214.45	226.34	5%
Site 5c	8.34	0.02	47.03	55.39	15%
Total	20.23	0.02	273.66	293.91	

* Higher constraints = High + Moderate conservation values

Two of the three sites in the Marulan urban fringe include mapped higher constraints (Figure 8). All mapped higher constraints consist of High conservation values.

The constraints within Site 5b are made up of a riparian corridor as well as an area of threatened vegetation, both making up approximately 5% of the site. The higher constraint on Site 5c is entirely made up of threatened vegetation and occurs over about 15% of the site.

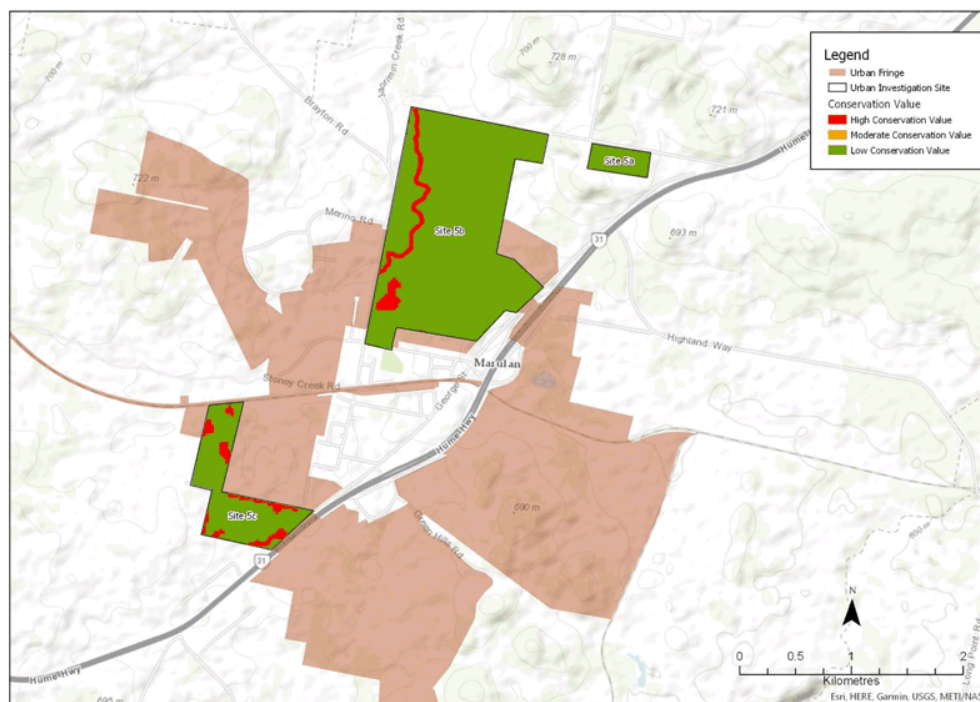


Figure 8: Marulan conservation values

High Environmental Value (HEV) Land

High environmental value land mapping aims to provide a regional overview for strategic planning purposes.

The criteria for mapping lands with high environmental value include:

- Existing conservation areas including national parks, crown and State Forest reserves
- Threatened ecological communities and key habitats and important vegetation areas
- Important wetlands, coastal lakes and estuaries; and
- Sites of geological significance.

A breakdown of the proportion of HEV land by study area site has been summarised in Table 7 and Figure 9 for the Goulburn urban fringe; and Table 8 and Figure 10 for the Marulan urban fringe.

Table 7: Goulburn study area sites HEV

Study Site ID	HEV (ha)	Site (ha)	% of site with HEV
Excluded	-	527.84	-
Site 2	-	313.66	-
Site 3	18.41	530.23	3%
Total	18.41	1371.73	

There are a number of small parts of Site 3 (3%) which are mapped as HEV. These areas are primarily made up of land with high conservation values including threatened ecological communities.

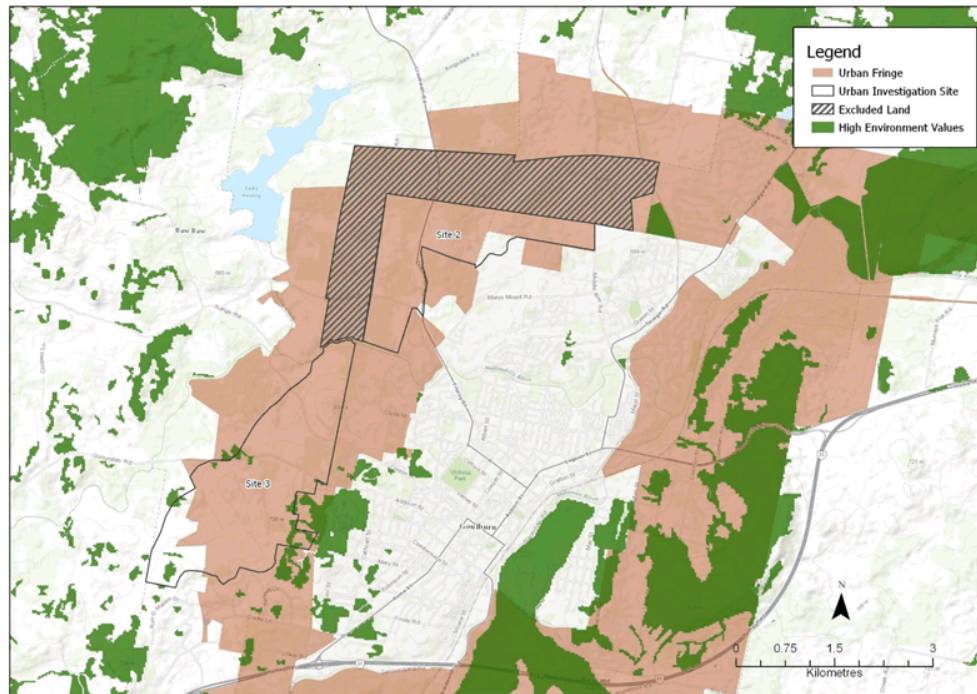


Figure 9: Goulburn HEV lands

Table 8: Marulan study area sites HEV lands

Study Site ID	HEV (ha)	Site (ha)	% of site with HEV
Site 5a	-	12.18	-
Site 5b	4.08	226.34	2%
Site 5c	7.96	55.39	14%
Total	12.05	293.91	

Two of the three sites in the Marulan urban fringe include mapped HEV (Figure 10). They both entirely consist of mapped threatened ecological communities.

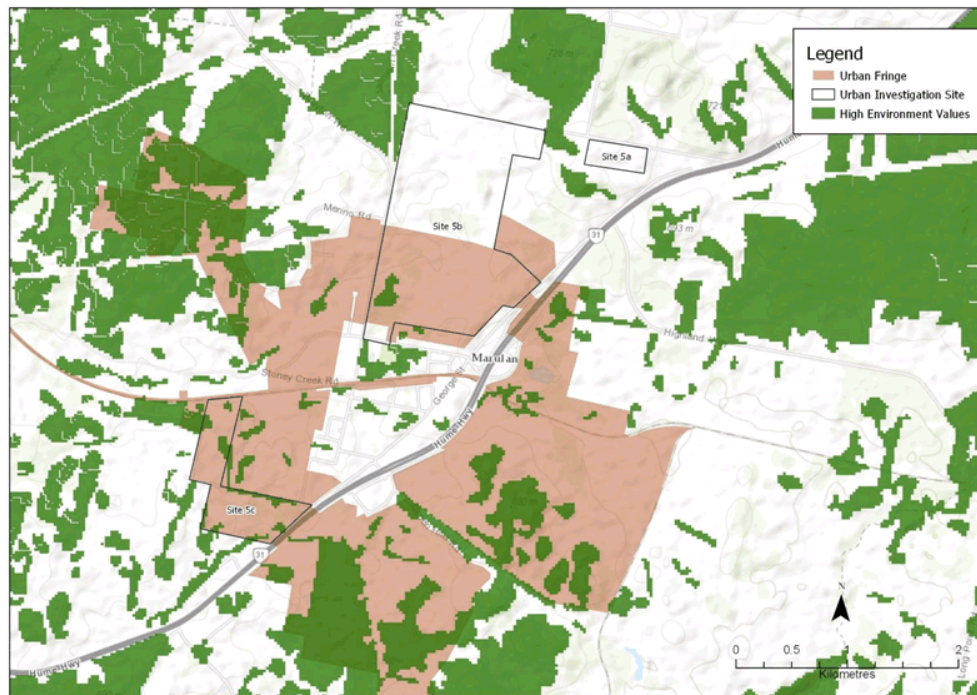


Figure 10: Marulan HEV lands

State and Regional Biodiversity Corridors

There are a number of State and Regional biodiversity corridors within the broader region, providing linkages between significant areas of biodiversity (Figure 11). The study areas do not fall within the mapped corridors.

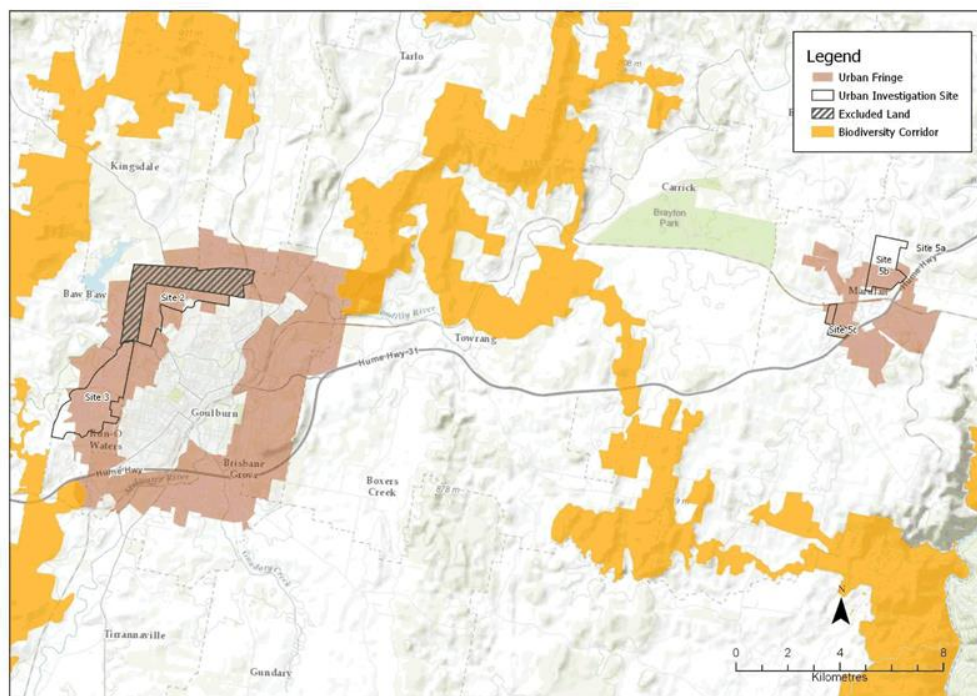


Figure 11: State and Regional Biodiversity Corridors

Land Use

Riparian Corridors

Vegetated riparian zone corridor width guidelines for waterfront land are defined by the NSW Office of Water DPI. These apply to controlled activities that are regulated under the Water Management Act, such as urban development. The following extract from the guidelines was used to assess the area of riparian corridor likely to be required with each of the study area sites.

Riparian corridor widths

The Officer of Water recommends a VRZ width based on watercourse order as classified under the Strahler System of ordering watercourses and using current 1:25 000 topographic maps (see Figure 2 and Table 1). The width of the VRZ should be measured from the top of the highest bank on both sides of the watercourse.

Figure 2. The Strahler System

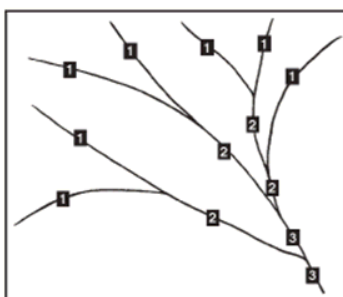


Table 1. Recommended riparian corridor (RC) widths

Watercourse type	VRZ width (each side of watercourse)	Total RC width
1 st order	10 metres	20 m + channel width
2 nd order	20 metres	40 m + channel width
3 rd order	30 metres	60 m + channel width
4 th order and greater (includes estuaries, wetlands and any parts of rivers influenced by tidal waters)	40 metres	80 m + channel width

Note: where a watercourse does not exhibit the features of a defined channel with bed and banks, the Office of Water may determine that the watercourse is not waterfront land for the purposes of the WM Act

All of the study area sites within the Goulburn urban fringe include mapped drainage lines which make up either 4% (Site 2) or 6% (Site 3) of the sites. A breakdown of the area of riparian buffer required by each site is summarised in Table 9 and shown in Figure 12.

Table 9: Goulburn riparian buffer requirements

Study Site ID	Stream Order (ha)				Total	Site (ha)	% Riparian buffer of site
	1st (10m buffer)	2nd (20m buffer)	3rd (30m buffer)	4th or greater (40m buffer)			
Excluded	12.56	15.23	2.87	2.47	33.13	527.84	6%
Site 2	8.23	4.28			12.51	313.66	4%
Site 3	14.23	12.80	3.12	1.50	31.65	530.23	6%
Total	35.02	32.31	6.00	3.97	77.30	1,371.73	

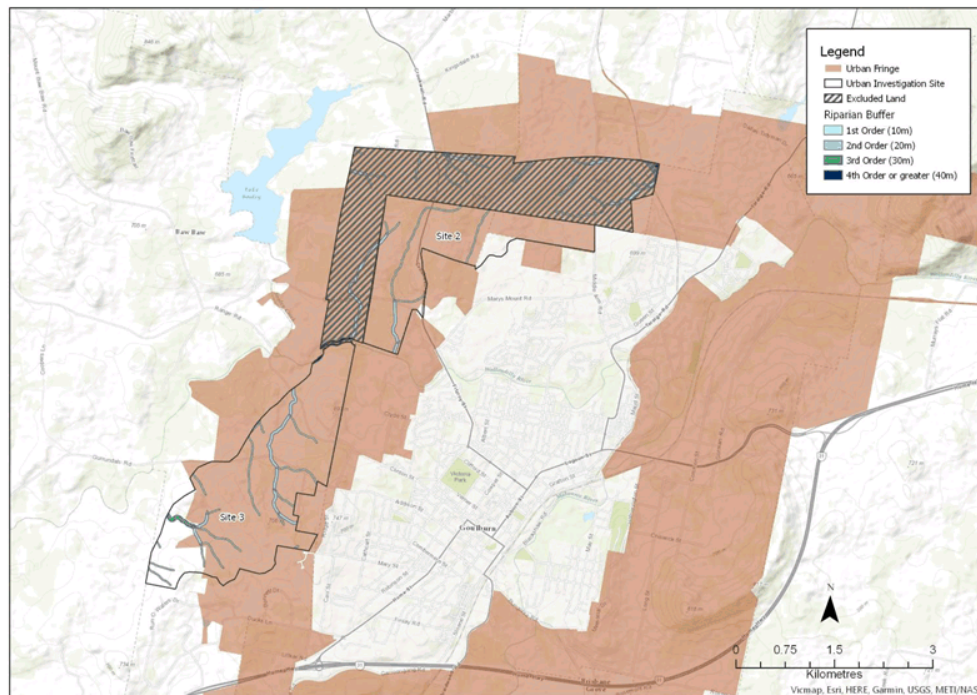


Figure 12: Goulburn riparian buffers

All of the study area sites within the Marulan urban fringe include a mapped drainage line which make up 7% (Site 5a), 13% (Site 5b) or 11% (Site 5c) of the sites. Site 5b requires a major riparian buffer (80m total) along a 4th order drainage line. A breakdown of the area of riparian buffer required by each site is summarised in Table 10 and shown in Figure 13.

Table 10: Marulan riparian buffer requirements

Stream Order (ha)							
Study Site ID	1st (10m buffer)	2nd (20m buffer)	3rd (30m buffer)	4th or greater (40m buffer)	Total	Site (ha)	% Riparian buffer of site
Site 5a	0.87				0.87	12.18	7%
Site 5b	8.15	5.59		15.87	29.61	226.34	13%
Site 5c	2.03	2.01	2.00		6.04	55.39	11%
Total	11.05	7.60	2.00	15.87	36.52	293.91	

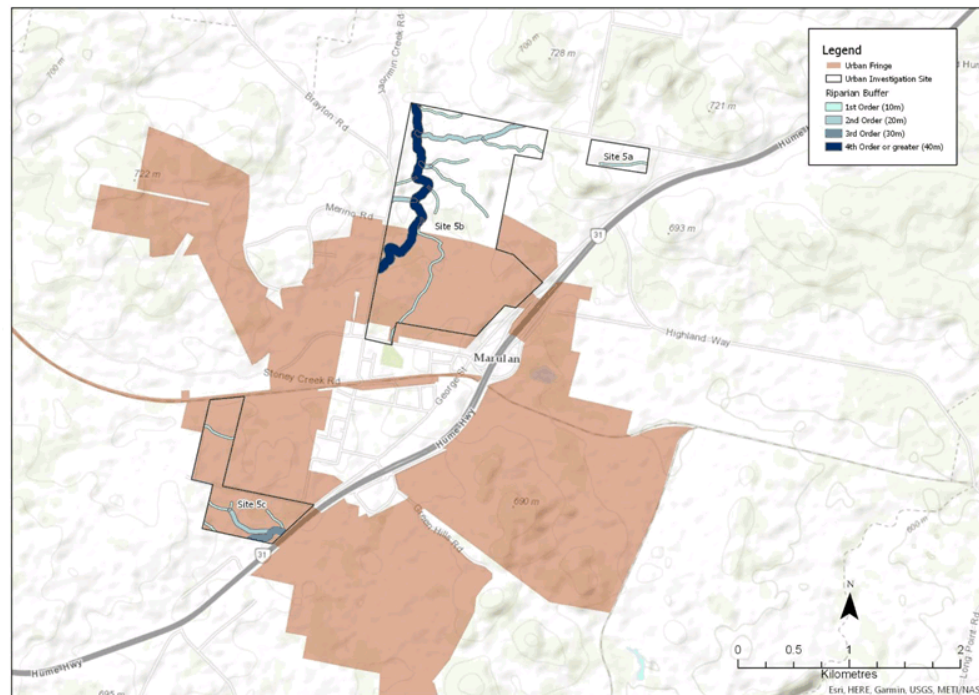


Figure 13: Marulan riparian buffers

Risk

Flood prone land

There are lands within the Goulburn area that have been identified as having potential flood risk. This includes land that is immediately adjacent to Site 3, however, no study area sites fall within the mapped potential flood risk area (Figure 14).

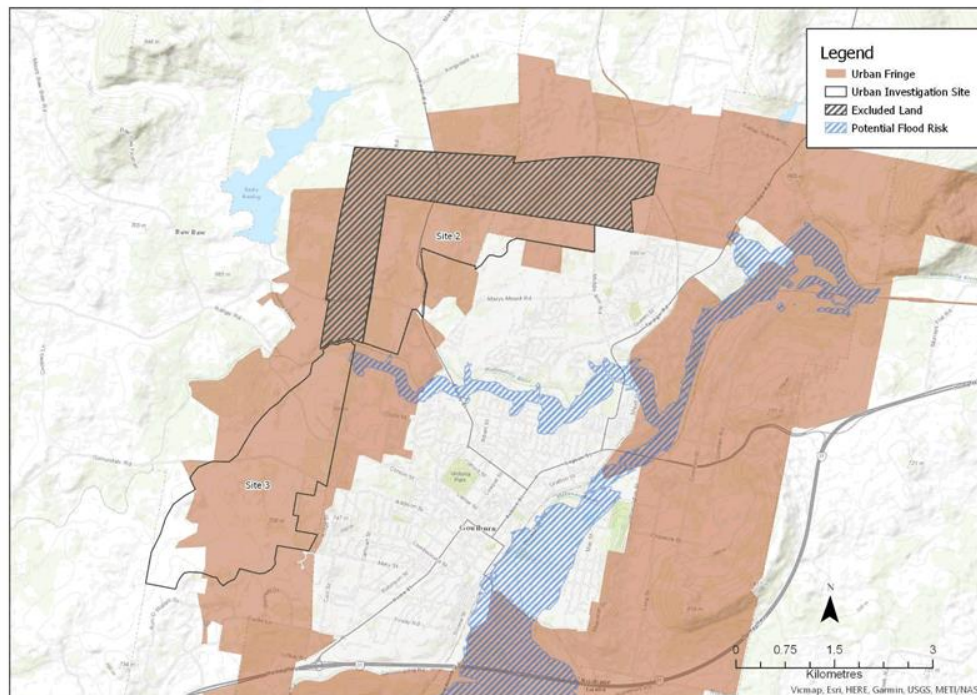


Figure 14: Potential flood risk

Steep Lands – Slope

Lands around the Goulburn and Marulan region have been identified as steep and highly erodible with slopes of 18° or greater (OEH 2011). A small area of approximately 0.8ha has been mapped as steep land, having slopes greater than 18° in Site 3 within the Goulburn urban fringe (Figure 15).

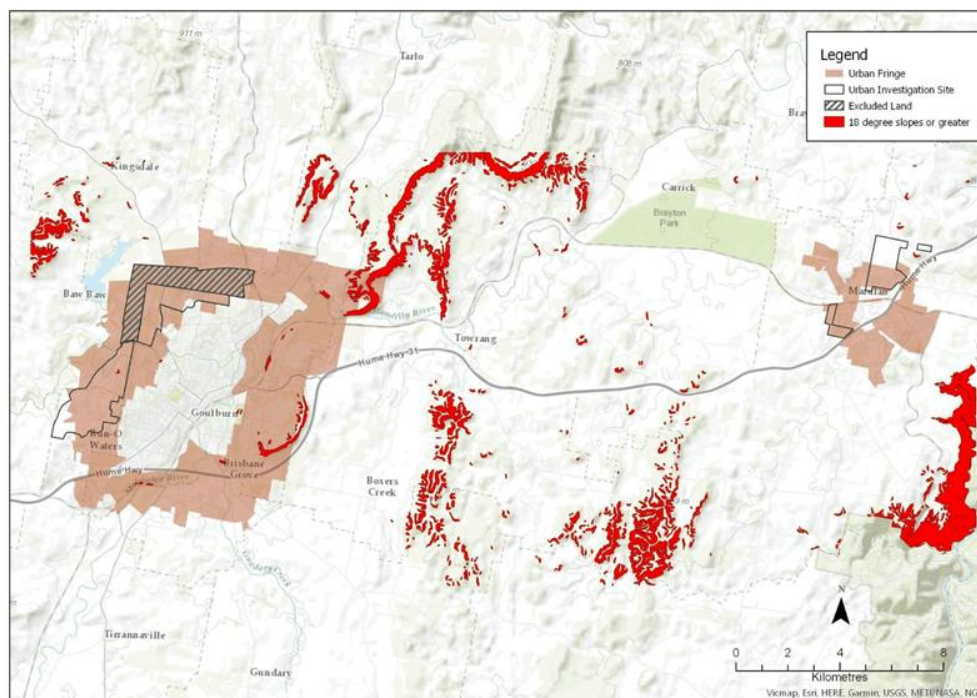


Figure 15: Steep slopes - greater than or equal to 18 degrees

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Appendix A - Vegetation breakdown by Site

Goulburn

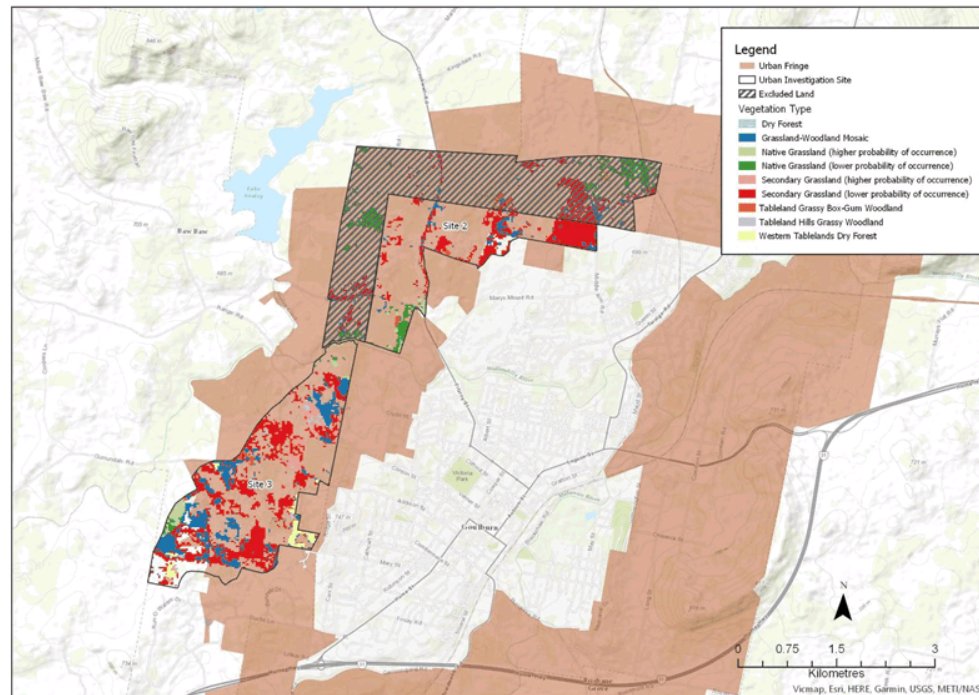


Figure 16: Vegetation type - Goulburn study area sites

Table 11: Vegetation type - Site 2

Vegetation Type	Area (ha)
Natural Temperate Grasslands of the Southern Tablelands of NSW and the ACT*	3.95
White Box-Yellow Box-Blakely's Red Gum Grassy Woodland and Derived Native Grassland*	1.69
Grassland-Woodland Mosaic	11.43
Native Grassland (lower probability of occurrence)	8.62
Secondary Grassland (higher probability of occurrence)	1.04
Secondary Grassland (lower probability of occurrence)	61.40
Total	88.13

Table 12: Vegetation type - Site 3

Vegetation Type	Area (ha)
Natural Temperate Grasslands of the Southern Tablelands of NSW and the ACT*	9.49
White Box-Yellow Box-Blakely's Red Gum Grassy Woodland and Derived Native Grassland*	3.12
Dry Forest	2.98
Grassland-Woodland Mosaic	68.66
Native Grassland (lower probability of occurrence)	2.99
Secondary Grassland (higher probability of occurrence)	19.65
Secondary Grassland (lower probability of occurrence)	133.55
Tableland Hills Grassy Woodland	1.18
Western Tablelands Dry Forest	12.01
Total	253.63

Table 13: Vegetation type - excluded lands

Vegetation Type	Area (ha)
Natural Temperate Grasslands of the Southern Tablelands of NSW and the ACT*	5.51
White Box-Yellow Box-Blakely's Red Gum Grassy Woodland and Derived Native Grassland*	3.34
Grassland-Woodland Mosaic	9.10
Native Grassland (lower probability of occurrence)	39.96
Secondary Grassland (lower probability of occurrence)	54.02
Total	111.92

Marulan

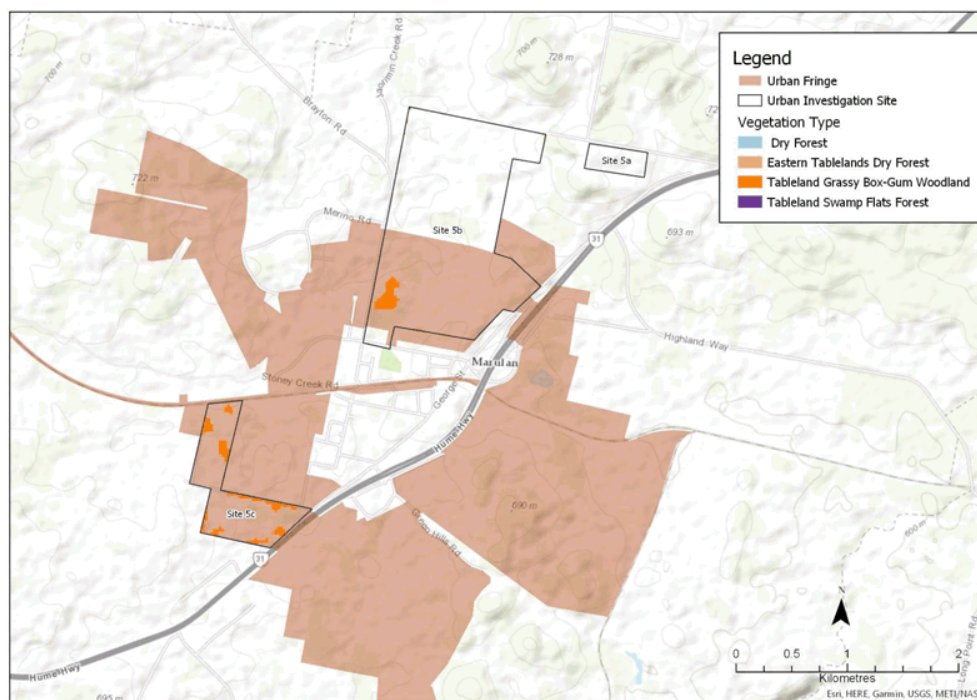


Figure 17: Vegetation type - Marulan study area sites

Table 14: Vegetation type - Site 5b

Vegetation Type	Area (ha)
White Box-Yellow Box-Blakely's Red Gum Grassy Woodland and Derived Native Grassland*	4.05
Eastern Tablelands Dry Forest	0.08
Tableland Swamp Flats Forest	0.03
Total	4.16

Table 15: Vegetation type - Site 5c

Vegetation Type	Area (ha)
White Box-Yellow Box-Blakely's Red Gum Grassy Woodland and Derived Native Grassland*	7.85
Dry Forest	0.16
Total	8.00

Goulburn Urban Fringe Housing Strategy – Constraints Analysis (Potential Large Lot Residential Precincts)

Area of interest

The area of interest consists of the lands within a 5km radius of Goulburn. A number of Precincts were identified and provided, associated the urban fringe as lands with potential for large lot rural residential development (Figure 1). Each area was referred to with a provided Precinct name (Table 1).

Table 1: Potential large lot rural residential precincts (sites)

Precincts	Area (ha)
Brisbane Grove	342.11
Clyde Street West	90.80
Gormans Road	38.56
Gurrundah Road	132.55
Marys Mount North	478.63
Mountain Ash Road	116.24
South Chinamans Lane	43.87
Urban Release Area	83.91
West Goulburn	244.06
Total	1,570.74

Desktop constraints based on available data and rapid visual validation were noted for each of these Precincts.

Goulburn Urban Fringe Housing Strategy Precincts – Biodiversity Constraints

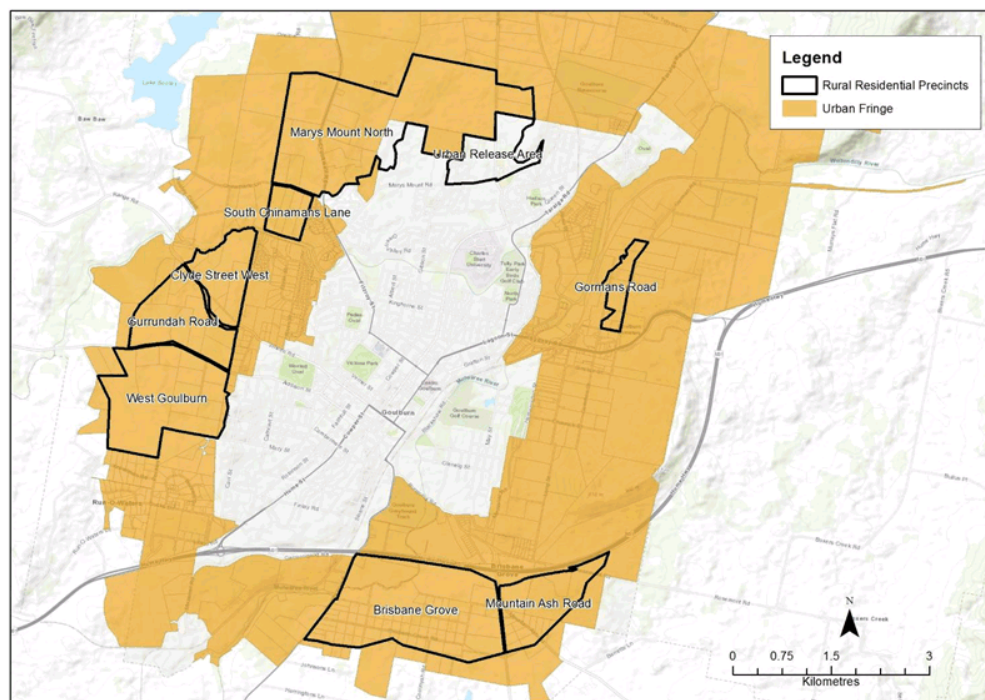


Figure 1: Goulburn study area sites

Data

A number of key data sets were identified to assist and support analysis for the Strategy. Data sets included:

Theme	Data	Source	Usage
Biodiversity	Threatened species locations (State/Commonwealth)	Atlas of NSW Wildlife/BioNet (OEH 2018)	Identified recorded threatened species within 5km of study area Precincts
		EPBC Protected matters search (DEE 2018)	Protected matters search tool for matters of National Environmental Significance within a 5km radius of Goulburn
Biodiversity	Vegetation type mapping Threatened ecological communities (State/Commonwealth)	SELLS (OEH 2014)	Identified potential candidate TECs across study area Precincts
Biodiversity	Vegetation mapping Potential threatened ecological communities July 2014	Council / OEH	Identified potential candidate TECs across some study area Precincts

Goulburn Urban Fringe Housing Strategy Precincts – Biodiversity Constraints

Theme	Data	Source	Usage
Riparian	Drainage Strahler stream order classification	Strahler classified drainage (LPI)	Buffered stream order according to Office of Water DPI riparian corridor widths for Riparian buffers
Conservation	High Environmental Value (HEV) lands	OEI (2016)	Identified areas of HEV by Precinct
Conservation	State and Regional Biodiversity Corridors (South East Tablelands)	OEI (2018)	Context – no corridors identified in or around study areas
Vulnerable lands	Steep slopes or highly erodible	State-wide dataset (OEI 2011)	Land with slope > 18 degrees identified within the study area as high erosion risk
Flood Risk	Flood prone lands	Council	Land prone to flooding within the study area as high risk
Precincts	Investigation Planning precinct areas for potential rural residential	Council	Study area to base constraints assessment

Rapid Validation

A rapid visual field validation over the Precincts was carried out on Monday 8th July 2019 of the existing vegetation mapping. The validation was carried out from accessible public roads adjoining the identified Precincts. The purpose of the validation was to visually identify and update the existing mapped vegetation data with any gross inconsistencies. No detailed survey was carried out over the Precincts.

Rapid validation outcomes were incorporated into the assessment of:

- Threatened Ecological Communities;
- High Environmental Value Land; and
- Precinct vegetation breakdown.

Further details regarding the rapid validation is provided in Appendix B.

Biodiversity Values

Threatened Ecological Communities (TECs)

Three TECs are mapped within the study area Precincts. They are:

- White Box-Yellow Box-Blakely's Red Gum Grassy Woodland and Derived Native Grassland (Listed under the BCA and EPBC) – 98 ha
- Tablelands Snow Gum, Black Sallee, Candlebark and Ribbon Gum Grassy Woodland in the South Eastern Highlands, Sydney Basin, South East Corner and NSW South Western Slopes Bioregions (Listed under the BCA and EPBC) – 2 ha
- Natural Temperate Grasslands of the Southern Tablelands of NSW and the ACT (Listed under EPBC) – 27 ha

The breakdown of the amount of TECs following rapid validation across the study Precincts is shown in Table 2 and mapped in Figure 2.

More detailed vegetation type mapping and an area breakdown for each of the study area Precincts is provided in Appendix A.

Table 2: Area of TECs within the study area Precincts

Precincts	Vegetation (ha)			Precinct area (ha)	% TEC of Precinct	% TEC of vegetation
	TEC	Other vegetation	Total Vegetation			
Brisbane Grove	-	-	-	342.11	-	-
Clyde Street West	-	-	-	90.8	-	-
Gormans Road	-	5.27	5.27	38.56	-	-
Gurrundah Road	3.43	-	3.43	132.55	3%	100%
Marys Mount North	72.48	23.01	95.49	478.63	15%	76%
Mountain Ash Road	14.37	1.99	16.36	116.24	12%	88%
South Chinamans Lane	21.69	-	21.69	43.87	49%	100%
Urban Release Area	4.75	1.41	6.17	83.91	6%	77%
West Goulburn	10.44	15.82	26.26	244.06	4%	40%
Total	127.16	47.51	174.67	1,479.94	9%	73%

TECs exist in the majority of the Precincts identified for rural residential investigation in the north west and western parts of Goulburn's urban fringe and they cover about 9% of the total area of the study area Precincts. The Precinct with the greatest amount of TEC is Marys Mount North (72ha), making up about 15% of the area of the Precinct. Other precincts that include larger areas of TECs are South Chinamans Lane (22ha and about half of the Precinct), Mountain Ash Road (14ha, making up 12% of the Precinct) and West Goulburn (10ha, making up 4% of the Precinct).

Goulburn Urban Fringe Housing Strategy Precincts – Biodiversity Constraints

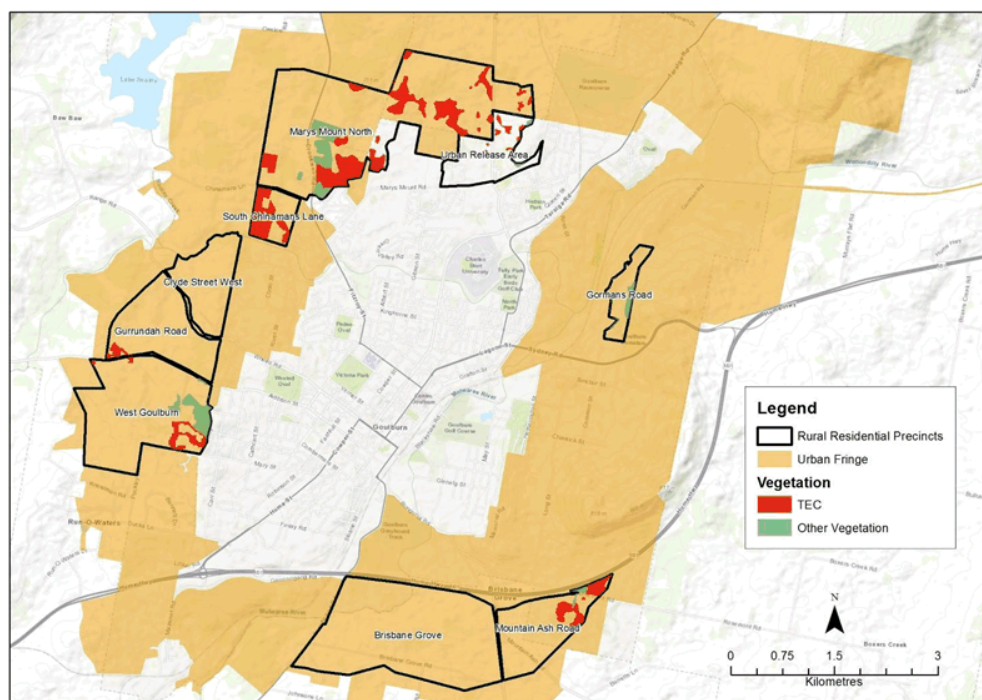


Figure 2: TECs

Threatened Species

A search of the Atlas of NSW Wildlife (BioNet) was carried out in October 2018 to identify records of threatened flora and fauna within 5km of the study area Precincts.

Threatened fauna

A total of 14 fauna species listed under the BC Act, including 3 species listed under the EPBC Act, were identified within 5km of the study area Precincts (Table 3).

No threatened species were recorded within the study area Precincts (Figure 3).

Table 3: Threatened fauna species recorded within 5km of study area Precincts

Class	Scientific name	Common Name	BC Act	EPBC Act	Recorded number of individuals*
Aves	<i>Anthochaera phrygia</i>	Regent Honeyeater	E	CE	2
Aves	<i>Artamus cyanopterus cyanopterus</i>	Dusky Woodswallow	V	-	0
Aves	<i>Callocephalon fimbriatum</i>	Gang-gang Cockatoo	V	-	1
Aves	<i>Chthonicola sagittata</i>	Speckled Warbler	V	-	0
Aves	<i>Daphoenositta chrysoptera</i>	Varied Sittella	V	-	0
Aves	<i>Ephippiorhynchus asiaticus</i>	Black-necked Stork	E	-	1
Aves	<i>Falco subniger</i>	Black Falcon	V	-	0
Aves	<i>Hieraaetus morphnoides</i>	Little Eagle	V	-	0

Goulburn Urban Fringe Housing Strategy Precincts – Biodiversity Constraints

Class	Scientific name	Common Name	BC Act	EPBC Act	Recorded number of individuals*
Aves	<i>Petroica boodang</i>	Scarlet Robin	V	-	0
Mammalia	<i>Falsistrellus tasmaniensis</i>	Eastern False Pipistrelle	V	-	0
Mammalia	<i>Miniopterus schreibersii oceanensis</i>	Eastern Bentwing-bat	V	-	0
Mammalia	<i>Pteropus poliocephalus</i>	Grey-headed Flying-fox	V	V	10
Mammalia	<i>Saccolaimus flaviventris</i>	Yellow-bellied Sheathtail-bat	V	-	0
Reptilia	<i>Delma impar</i>	Striped Legless Lizard	V	V	1

CE – Critically Endangered, E – Endangered, V – Vulnerable

*A value of 0 denotes that while the species has been recorded, numbers of individuals were not noted

Threatened flora

Two flora species listed under the BC Act and the EPBC Act were identified within 5km of the study area Precincts (Table 4).

No threatened flora species have been recorded within the study area Precincts (Figure 3).

Table 4: Recorded threatened flora species within 5km of the study area Precincts

Scientific name	Common Name	BC Act	EPBC Act	Recorded number of individuals*
<i>Diuris aequalis</i>	Buttercup Doubletail	E	V	0
<i>Rutidosis leptorrhynchoides</i>	Button Wrinklewort	E	E	0

E – Endangered, V – Vulnerable

*A value of 0 denotes that while the species has been recorded, numbers of individuals have not been recorded

Goulburn Urban Fringe Housing Strategy Precincts – Biodiversity Constraints

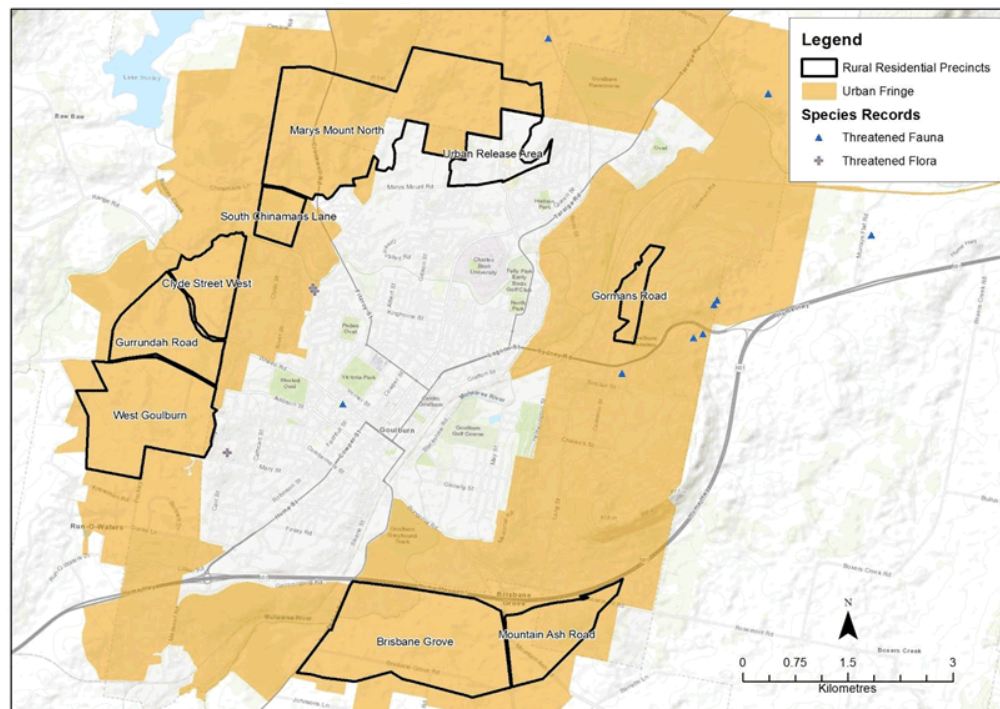


Figure 3: Recorded threatened species (Atlas of NSW Wildlife October 2018)

Matters of National Environmental Significance (MNES)

An EPBC Act Protected Matters Report (DEE 2018) was generated on 2 November 2018 based on a 5 km buffer around the town centre of Goulburn.

The following matters have been identified as being likely to occur or known to occur in the proximity of Goulburn:

- 2 listed threatened ecological communities (TECs) (known to occur)
- 22 listed threatened fauna species (3 known to occur)
- 14 listed threatened flora species (1 known to occur)
- 12 listed migratory species

A protected matters report including the details of all identified MNES for Goulburn was prepared.

High Environmental Value (HEV) Land

High environmental value land mapping aims to provide a regional overview for strategic planning purposes.

The criteria for mapping lands with high environmental value include:

- Existing conservation areas including national parks, crown and State Forest reserves
- Threatened ecological communities and key habitats and important vegetation areas

- Important wetlands, coastal lakes and estuaries; and
- Sites of geological significance.

A breakdown of the proportion of HEV land by study area Precinct has been summarised in Table 5 and Figure 4 within the Goulburn urban fringe.

Table 5: Study area Precincts HEV

Precincts	HEV (ha)	Precinct (ha)	% of Precinct with HEV
Brisbane Grove	30.69	342.11	9%
Clyde Street West	-	90.8	-
Gormans Road	1.26	38.56	3%
Gurrundah Road	3.43	132.55	3%
Marys Mount North	-	478.63	-
Mountain Ash Road	5.20	116.24	4%
South Chinamans Lane	-	43.87	-
Urban Release Area	-	83.91	-
West Goulburn	26.26	244.06	11%
Total	66.83	873.53	8%

Mapped and validated HEV across the Precincts is primarily associated with land that includes high conservation values. For the Precincts located to the west of Goulburn (West Goulburn) the key values are related to ecological communities and key habitats (11% of the Precinct), whereas to the south of Goulburn (Brisbane Grove & Mountain Ash Road), values are primarily based on riparian areas (9% and 4% respectively).

Goulburn Urban Fringe Housing Strategy Precincts – Biodiversity Constraints

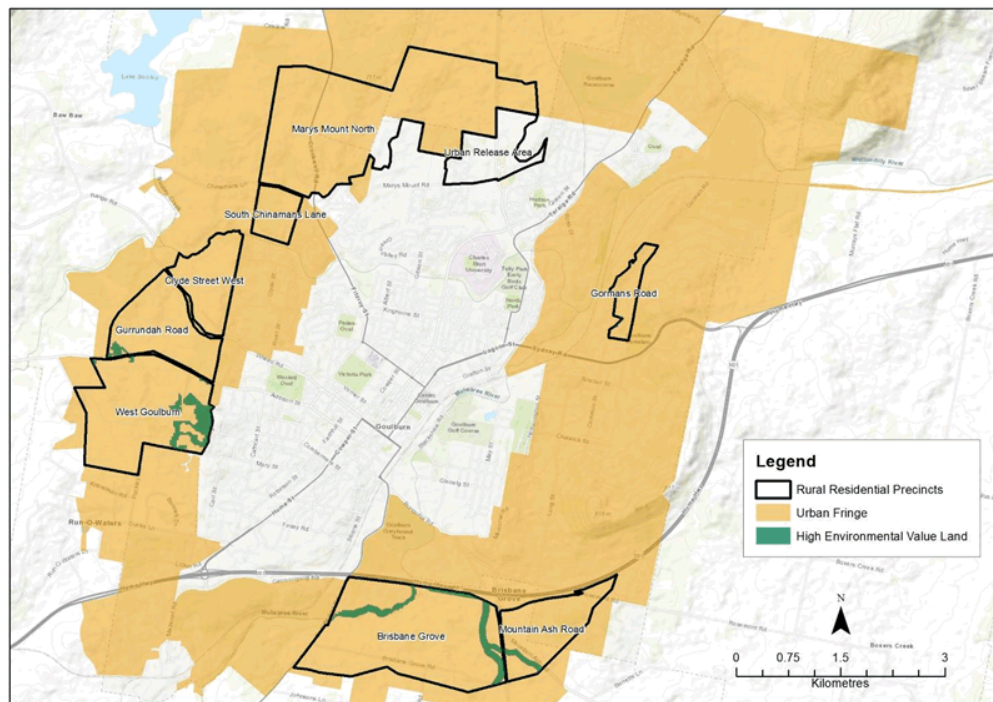


Figure 4: Precinct HEV lands

State and Regional Biodiversity Corridors

There are a number of State and Regional biodiversity corridors within the broader region, providing linkages between significant areas of biodiversity (Figure 5). The study area Precincts do not fall within the mapped corridors.

Goulburn Urban Fringe Housing Strategy Precincts – Biodiversity Constraints

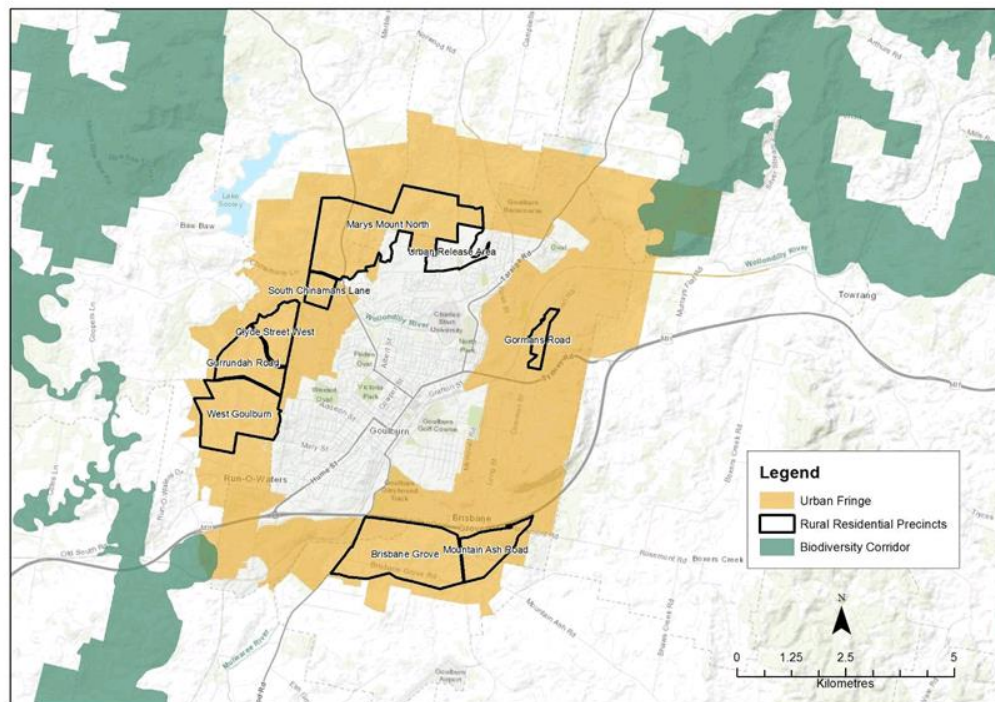


Figure 5: State and Regional Biodiversity Corridors

Riparian Corridors

Vegetated riparian zone corridor width guidelines for waterfront land are defined by the NSW Office of Water DPI (2012). These apply to controlled activities that are regulated under the Water Management Act, such as urban development. The following extract from the guidelines was used to assess the area of riparian corridor likely to be required within each of the study area Precincts.

Riparian corridor widths

The Officer of Water recommends a VRZ width based on watercourse order as classified under the Strahler System of ordering watercourses and using current 1:25 000 topographic maps (see Figure 2 and Table 1). The width of the VRZ should be measured from the top of the highest bank on both sides of the watercourse.

Figure 2. The Strahler System

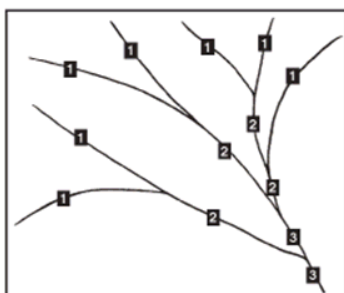


Table 1. Recommended riparian corridor (RC) widths

Watercourse type	VRZ width (each side of watercourse)	Total RC width
1 st order	10 metres	20 m + channel width
2 nd order	20 metres	40 m + channel width
3 rd order	30 metres	60 m + channel width
4 th order and greater (includes estuaries, wetlands and any parts of rivers influenced by tidal waters)	40 metres	80 m + channel width

Note: where a watercourse does not exhibit the features of a defined channel with bed and banks, the Office of Water may determine that the watercourse is not waterfront land for the purposes of the WM Act

(from DPI 2012)

All of the study area Precincts within the urban fringe include mapped drainage lines. The required riparian buffers for these drainage lines total to approximately 6% of all precincts; with the greatest proportion of required riparian buffer occurring in Brisbane Grove (12%) and Mountain Ash Road (9%) Precincts to the south. A breakdown of the area of riparian buffer zone required by each Precinct is summarised in Table 6 and shown in Figure 6.

Table 6: Riparian buffer requirements

Precincts	Stream Order				Total	Precinct (ha)	% Riparian buffer of precinct
	1st (10m buffer)	2nd (20m buffer)	3rd (30m buffer)	4th or greater (40m buffer)			
Brisbane Grove	3.27	9.37	0.19	28.51	41.35	342.11	12%
Clyde Street West		1.68	-	2.25	3.94	90.80	4%
Gormans Road	1.10	2.08	-	-	3.18	38.56	8%
Gurrundah Road	3.35	6.04	-	-	9.38	132.55	7%
Marys Mount North	13.85	2.09	-	-	15.94	478.63	3%
Mountain Ash Road	1.53	3.50	-	5.20	10.23	116.24	9%
South Chinamans Lane	0.15	3.21	-	-	3.36	43.87	8%
Urban Release Area	0.07		-	-	0.07	83.91	0%
West Goulburn	8.07	5.83	-	-	13.91	244.06	6%
Total	31.40	33.81	0.19	35.97	101.36	1,570.74	6%

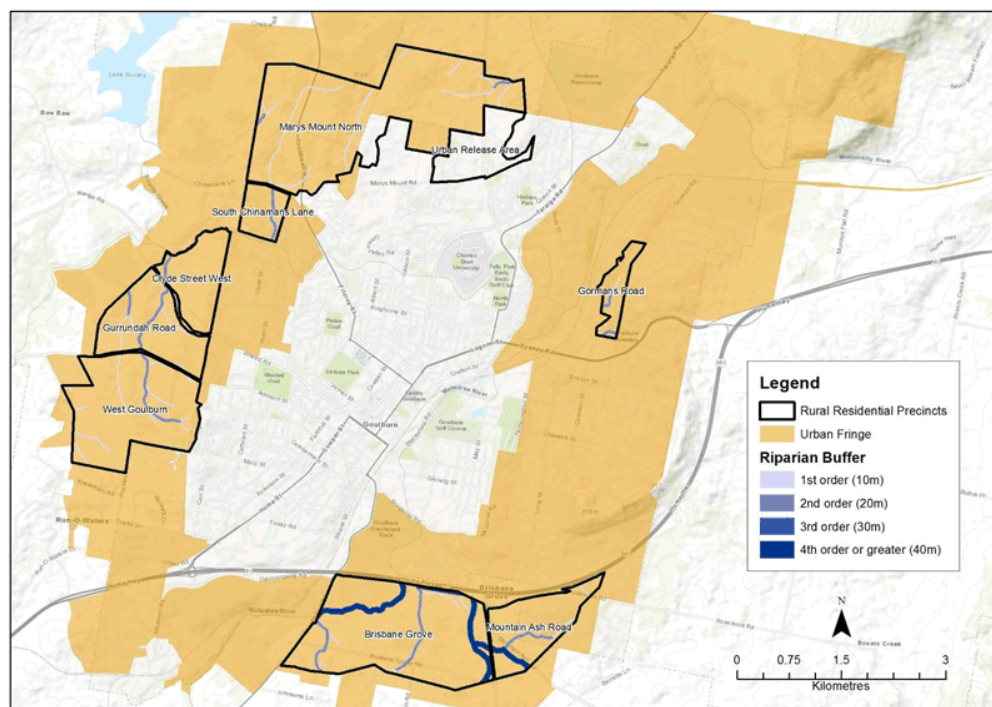


Figure 6: Riparian buffers within Precincts

Risk

Flood prone land

There are lands within the Goulburn area that have been identified as having potential flood risk. This includes land that is immediately adjacent / bordering the Clyde Street West precinct; as well as a large proportion (38%) of the Brisbane Grove Precinct, which covers about 130 ha in area (Figure 7).

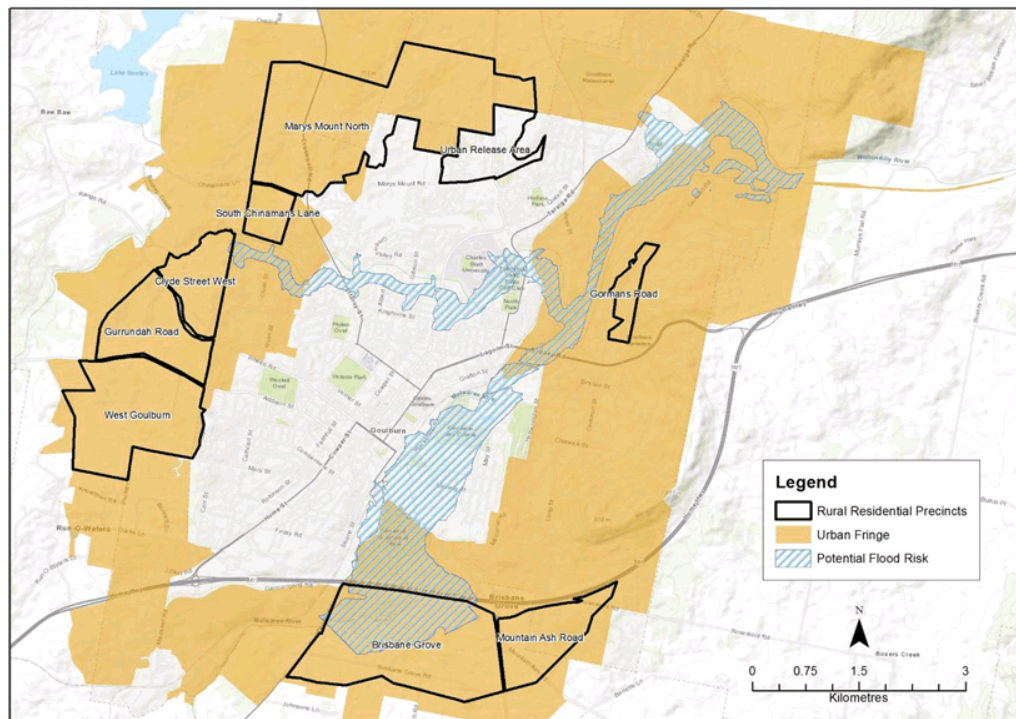


Figure 7: Potential flood risk

Steep Lands – Slope

Some lands around the Goulburn region have been identified as steep and highly erodible with slopes of 18° or greater (OEH 2011). A small area of approximately 0.8ha has been mapped as steep land, having slopes greater than 18° within the Clyde Street West Precinct of the urban fringe (Figure 8).

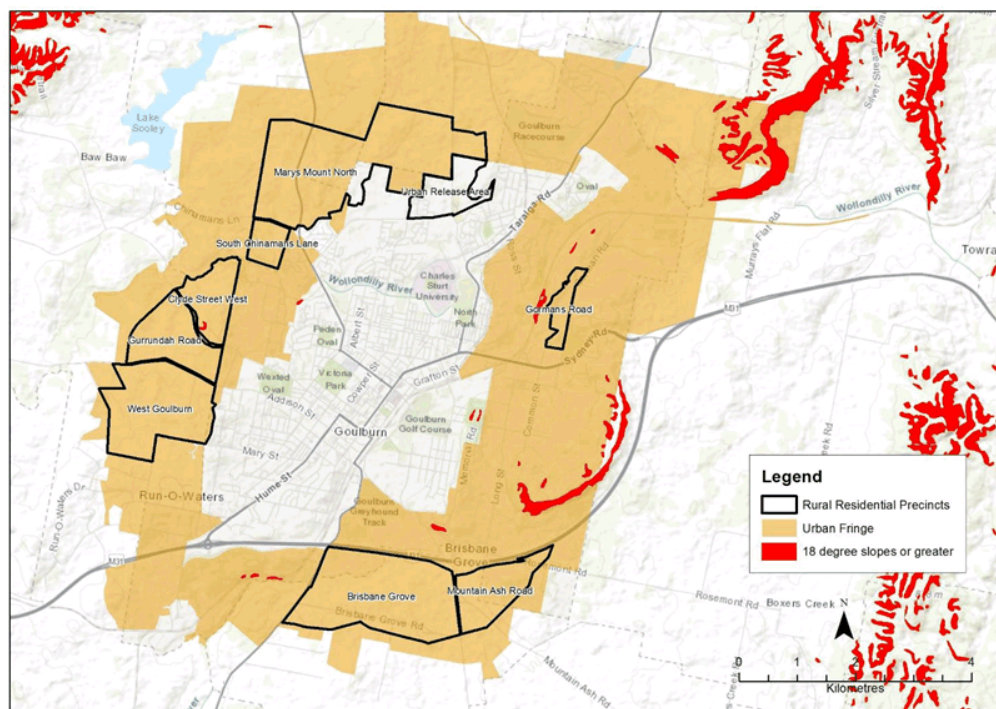


Figure 8: Steep slopes - greater than or equal to 18 degrees

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Appendix A - Vegetation breakdown by Precinct

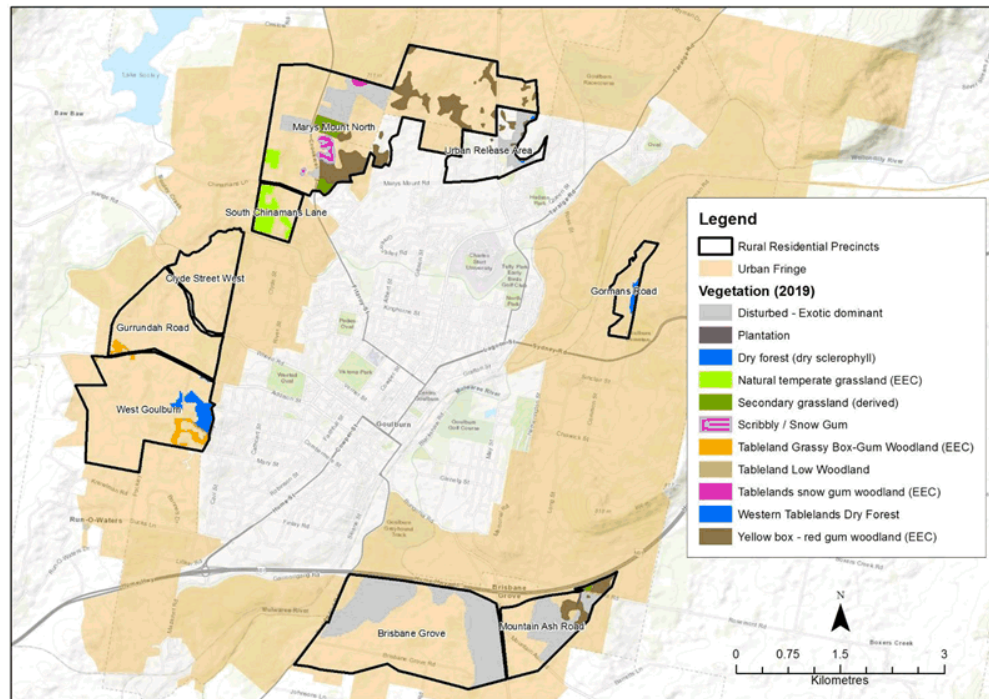


Figure 9: Vegetation type - study area Precincts

Table 7: Vegetation type – Study area Precincts

Mapped Vegetation Type	Area (ha)
Brisbane Grove	
Disturbed - Exotic dominant	130.02
Total	130.02
Gormans Road	
Tableland Low Woodland	0.56
Western Tablelands Dry Forest	4.71
Total	5.27
Gurrundah Road	
Tableland Grassy Box-Gum Woodland*	3.43
Total	3.43

Goulburn Urban Fringe Housing Strategy Precincts – Biodiversity Constraints

Mapped Vegetation Type	Area (ha)
Marys Mount North	
Disturbed - Exotic dominant	45.12
Natural temperate grassland*	5.40
Scribbly / Snow Gum	9.28
Secondary grassland (derived)	13.74
Tablelands snow gum woodland*	2.15
Yellow box - red gum woodland*	64.93
Total	140.61
Mountain Ash Road	
Disturbed - Exotic dominant	43.69
Plantation	0.67
Secondary grassland (derived)	1.32
Yellow box - red gum woodland*	14.37
Total	60.06
South Chinamans Lane	
Natural temperate grassland*	21.69
Total	21.69
Urban Release Area	
Disturbed - Exotic dominant	17.99
Dry forest (dry sclerophyll)	1.41
Yellow box - red gum woodland*	4.75
Total	24.16
West Goulburn	
Tableland Grassy Box-Gum Woodland*	10.44
Western Tablelands Dry Forest	15.82
Total	26.26
Grand Total	411.49

* Threatened Ecological Community

Appendix B - Rapid Validation

A rapid visual validation exercise was carried out on Monday 8th July 2019 to assess existing vegetation mapping. The locations of areas of mapped vegetation that were validated are shown in Figure 10. Observed changes to mapped areas of vegetation are shown in Table 8; and notes relating to observations made at identified points to support the vegetation mapping update are provided in Table 9 below.

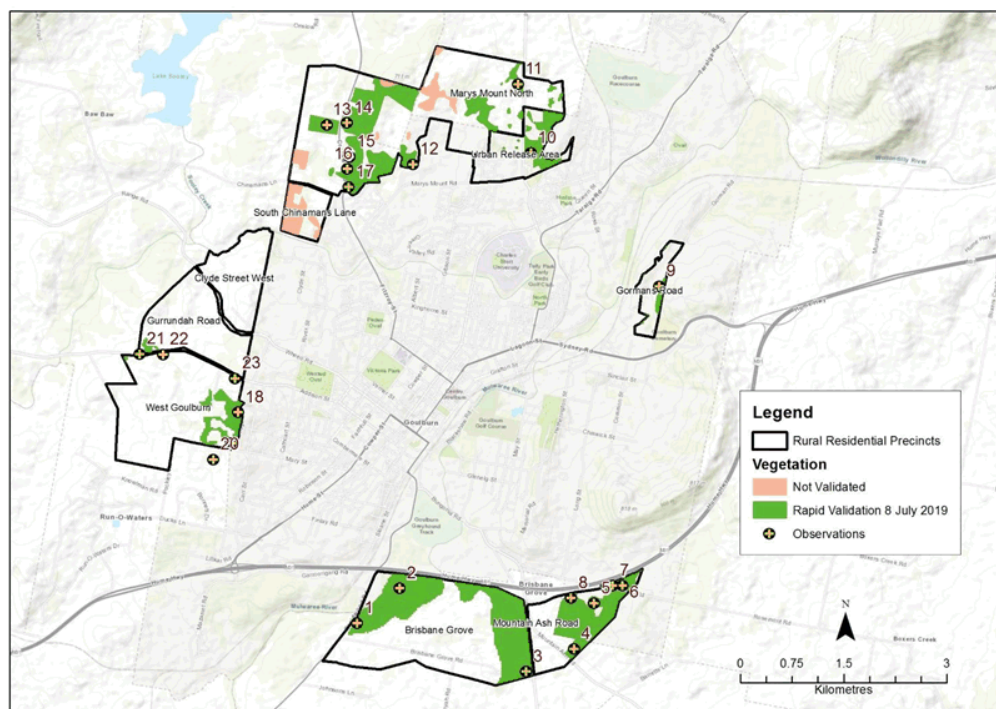


Figure 10: Rapid vegetation validation

Table 8: Vegetation changes from rapid visual validation

Vegetation Type	Mapped Area (ha)	Updated Area (ha)	Vegetation Change (ha)
Dry forest (dry sclerophyll)	1.84	1.41	0.42
Natural temperate grassland*	80.31	27.08	53.23
Plantation	0.67	0.67	0.00
Scribbly / Snow Gum	-	9.28	-9.28
Secondary grassland (derived)	66.87	15.05	51.82
Tableland Flats Grassland	125.50	-	125.50
Tableland Grassy Box-Gum Woodland*	6.85	13.87	-7.02

Goulburn Urban Fringe Housing Strategy Precincts – Biodiversity Constraints

Vegetation Type	Mapped Area (ha)	Updated Area (ha)	Vegetation Change (ha)
Tableland Hills Grassy Woodland	0.06	-	0.06
Tableland Low Woodland	0.56	0.56	0.00
Tableland Swamp Flats Forest	2.52	-	2.52
Tablelands snow gum woodland*	11.43	2.15	9.28
Western Tablelands Dry Forest	25.47	20.53	4.94
Yellow box - red gum woodland*	85.39	84.06	1.34
Unmapped^	4.02	-	4.02
Disturbed - Exotic dominant	-	236.83	-236.83
Grand Total	411.49	411.49	0.00

* Threatened Ecological Community; ^Additional vegetation identified through validation

Table 9: Rapid validation observations

Observation ID	Observation notes
1	Exotic pasture dominated by African Love Grass. Grazing occurrence is high with no native tussock grasses observed. Possibly some natives near dam/drainage.
2	Exotic Pasture
3	Exotic pasture. High grazing occurrence - horses. <i>Cynodon dactylon</i> present and exotic grasses.
4	Not secondary grassland. Cropping within the area
5	Box Gum Woodland. Likely exotic understorey, but heavily grazed.
6	Box Gum Woodland. Native understorey. Possibly moderate forbs. Weeds are likely limited to road edge. Some grazing of cows.
7	Box Gum Woodland – Derived Native Grassland
8	Unlikely secondary grassland. Observed high occurrence of dried weeds. Moderately grazed.
9	Scribbly Gum / Red Stringybark Woodland. Remainder of the Precinct is likely exotic, farming and housing.
10	Mixed grassland with some natives (<i>Rytidosperma sp. Austrostipa</i>), and exotics. Most likely exotic with moderate grazing - cows.
11	Scattered trees are of Box Gum Woodland overstorey and exotic understorey.
12	Box Gum Woodland with a likely exotic understorey. Observed lots of weed species. Mostly moderate grazing
13	Exotic Pasture - heavily grazed.
14	Secondary Grassland. Mostly native grasses, with some exotics. Very low grazing in paddock. Heaving sheep grazing throughout.
15	Scribbly Gum / Snow Gum Woodland (not a TEC)
16	Box Gum Woodland with a likely exotic understorey. Moderate to heavy grazing
17	Exotic Pasture of exotic grasses and weeds
18	Scribbly Gum / Stringybark Woodland. High Environmental Value.
19	Box Gum Woodland on lower / flatter slopes in the corner of the Precinct.

Goulburn Urban Fringe Housing Strategy Precincts – Biodiversity Constraints

Observation ID	Observation notes
20	Mapped High Environmental Value Box Gum Woodland of scattered trees amongst houses.
21	Mapped High Environmental Value area is Box Gum Woodland. Mostly exotic understorey, but likely some small patches of native understorey, such as near road verge
22	Box Gum Woodland - some planted and probably part of a regeneration project.
23	Small patch of Box Gum Woodland with exotic understorey.





Consultation Report

Urban and Fringe Housing Strategy

Client: Goulburn-Mulwaree Council

Date: 08 April 2020

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ATTACHMENTS

Talk of the Town

1 Introduction

Goulburn Mulwaree Council is in the process of preparing an Urban and Fringe Housing Strategy (the Strategy) to address an increasing shortage of available zoned residential land in Goulburn and Marulan.

The Strategy seeks to identify the future housing needs for Goulburn and Marulan and provide recommendations to guide land use decisions and local policy.

The Strategy has been developed in two phases with the first phase being the initial community and stakeholder engagement undertaken by Council in April and May 2018. This phase of the project established the issues and tested these with stakeholders and the community. This initial stage built on the vision of the LGA that has been adopted in the Regional Community Plan to:



To build and maintain sustainable communities while retaining the region's natural beauty.¹

Following the initial engagement, Council appointed Elton Consulting to prepare the Strategy.

A draft Strategy was developed having regard to the direction provided in the *South East and Tablelands Regional Plan 2036* and the draft *Housing Strategy Guidelines* prepared by the Department of Planning and Environment (DPE). The purpose of the Strategy is to guide land use and planning decisions and inform amendments to the *Goulburn Local Environmental Plan* in the immediate and medium term.

1.1 The Process

The steps in the preparation of the Strategy have been as follows:



1.2 Consultation and Strategy Development

Pre-Strategy Consultation (Stages 1 and 2)

Council commenced preparation of the Strategy early in 2018 with Pre-Strategy Consultation and a package of information to inform initial discussion referred to as *Talk of the Town*. The *Talk of*

¹ The Tablelands Regional Community Strategy Plan 2016-2036.

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the Town Housing and Residential Growth background information included a series of five information sheets (refer **Attachment A**).

Three workshops were conducted by Council Staff over the Pre-Strategy Consultation period. This comprised of two workshops in Goulburn and Marulan that were open to the general public and an industry focused workshop in Goulburn targeted specifically at industry bodies.

Talk of the Town background information

The *Talk of the Town* Housing and Residential Growth background information included a series of five information sheets to inform initial discussion on the Housing Strategy.

Sheet 1: Background

Sheet 2: Affordability, infrastructure and the role of Council

Sheet 3: Social needs and opportunities and environmental Considerations

Sheet 4: the role of planning policy and principles to guide decision making

Sheet 5: Study Area maps

The process included an online survey and a number of workshops and drop in sessions. During this period 9th April – 25th May.



What the Community Said

The Community Engagement approach included an interactive, online tool that allowed comments via a pin drop. Eleven pins were dropped in Goulburn. Comments ranged from the need to continue expansion in sync, the importance of preserve future urban land in the north from fragmentation into large lots and the need for additional land to be delivered in the west.

There were also comments highlighting the opportunities to the south of the existing urban footprint on both sides of the Hume Highway on Windellama Road.

Workshops

Three workshops were conducted by Council Staff over the Pre-Strategy Consultation period. This comprised of two workshops in Goulburn and Marulan that were open to the general public and an industry focused workshop in Goulburn targeted specifically at industry bodies.

Marulan Workshop

There were seven people who participated in the Marulan Workshop on 3 May 2018. Participants acknowledged that housing in Marulan was required to meet the needs of a broad demographic from younger first home buyers through to housing of the needs of older people and singles. The opportunity to deliver housing at an affordable price point was noted.

There was a view that larger lots were better and a converse view that smaller houses were important meeting the needs of households with only two people. It was suggested that there

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was an opportunity for higher density housing closer to the station. Although there was support of higher densities and housing to suit couples, dual occupancies and granny flats were considered unsuitable.

In terms of housing typology, it was felt that the country town character was important and that single storey dwellings more suitable and in keeping with the character. Accommodating larger lots close to town was also supported.

Goulburn Workshop

Goulburn attracted a larger rate of participation with between 15 and 20 participants on 10 May 2018. The group were divided to discuss specific topics. The key issues identified are outlined as follows:

» Planning Policy and Principles

This group highlighted the necessity of providing housing choice and diversity including consolidation, infill development in the form of secondary dwellings and dual occupancy. They recognised that Goulburn provided an alternative to Canberra based on affordability.

They held the view that Goulburn will grow when Council is behind the expansion and that the planning process for permissible development should be easier.

» Housing Affordability, Product Diversity and Demographics

Affordability is identified as a key factor in growth and this group highlighted the opportunity to provide increased densities in the CBD.

The larger lots and general built form of the newer development at Marys Mount was questioned and the 'bowling alley effect' was cited as an undesirable outcome in terms of the relationship between the setbacks and front fencing. In addition, the need for the conservation of land for open space verses the provision of private open space was discussed.

There were concerns about growth further from the CBD and the impact that creating a second town centre would have on the Goulburn CBD when so many retail premises are currently vacant.

Finally, the need for additional lifestyle development was flagged although there seemed to be different views as to whether this form of lot is more desirable when connected to sewerage.

» Social Needs, Opportunities and Natural Environment

This group looked at how housing shapes the community and there was a focus on diversity, walkability and communal spaces such as gardens. In terms of the needs of the community, affordable and energy efficient housing to suit a wide demographic was noted.

As for quality of housing sustainability was a reoccurring theme, including more trees in the streetscape and provision of quality open spaces were all important. Challenges raised included noting that the people building houses are not the end user and rentals lack insulation and solar.

In terms of walkability and transport provision of walking and cycling paths should be provided. It was noted that there is a strong cycling community and facilities such as bike parking for residents in development should be considered. The group suggested that Council could encourage the use of public transport both in town and between the region and Canberra. Amongst the challenges to walkability and provision open space were costs, the reluctance of developers to provide useable spaces, maintenance of open space and viability of public transport.

» Council's Role and Infrastructure

This group looked at what council needs to consider in providing housing over the next 20 years. Addressing demand by providing opportunities for a diverse range of housing, encouraging higher densities close to the CBD potentially including higher forms of development. Council should also

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be supporting the delivery of social housing dispersed through the residential areas. They supported the importance of sound planning.

There was support for additional 2ha lots spread throughout the fringe, rather than all together and having green spaces separating these.

Retention of the environmental heritage was also included important and support was provided for 3-10 story residential development close to the CBD.

Industry Workshop

The final workshop was undertaken with industry. Again, the detailed notes are attached in **Appendix A** and some of the key issues are highlighted here.

Participants were divided into three groups and looked first at the key drivers; Spatial, Demographic, Economic and Household Type. Responses were very similar to the issues discussed at the other community workshops.

Proximity to Canberra and Western Sydney, the willingness of people to travel for work as a trade-off for lifestyle and relocating from within the Goulburn Mulwaree LGA closer to the centre of Goulburn for better access to services. Demographic drivers included predominately providing for the over 50s and families. The price of land was considered as an economic driver both too expensive and by another group affordable encouraging development. Similarly, one group cited the quick sale of land and villas and another raised the issue of the small number lot available to the market at any one time. Villas and having a variety of housing typologies and were amongst the household drivers but one group questions whether smaller lots was something that was wanted.

The groups also discussed governance and infrastructure and planning principles and controls with very similar results to those flagged by the community in earlier workshops. Again, supporting increased density and diversity, managing the urban fringe and providing opportunities extending from Marys Mount and avoiding constrained land were key.

Controlling lots sizes and better using development controls to manage the built form, managing and preserving heritage and the historical character of the towns and taking a closer look at how infrastructure can be funded through local contributions. Aging in place protecting the integrity of the main street of Goulburn were all important.

Initial Agency Consultation

The initial phase also included seeking preliminary feedback from government agencies. Council received comments from the Department of Planning and Environment, Office of Environment and Heritage and Water NSW. The issues raised by the agencies are outlined in **Table 1** below and have been considered in the formulation of the Strategy.

Table 1 Preliminary Agency Consultation

Agency	Issues Raised
Department of Planning and Environment	<p>Strategy should address the South East and Tablelands Regional Plan, in particular Goulburn Local Government narrative and the directions as follow:</p> <p>Direction 8 Protect Important Agricultural Land</p> <p>Direction 13 Manage the ongoing use of mineral resources</p> <p>Direction 14 Protect important environmental assets</p> <p>Direction 15 Enhance biodiversity connections</p> <p>Direction 18 Secure water resources</p>

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Agency	Issues Raised
	Direction 23 Protect the region's heritage Direction 24 Deliver greater housing supply and choice Direction 25 Focus housing growth in locations that maximise infrastructure and services Direction 27 Deliver more opportunities for affordable housing Direction 28 Manage rural lifestyles The Strategy needs to address the Ministerial Directions
Office of Environment and Heritage	Need to consider impacts to biodiversity and factor in costs of offsetting. To maintain a supply of affordable housing areas with high biodiversity values should be avoided Constraints mapping should be undertaken to identify less constrained areas as suitable for development
Water NSW	Consider land capability and Ministerial Direction 5.2 Sydney Drinking Water Catchment In infill and existing urban areas stormwater management will need to be considered Consider capacity of sewerage network Seniors Housing will need to be connected to reticulated sewer Recommends review and update of Councils OSSM Strategy to ensure that it remains effective and achieves appropriate environmental outcomes on rural residential land

1.3 Preparation of a Draft Strategy

Following the initial community and stakeholder engagement, Council appointed Elton Consulting to prepare the Draft Strategy. The methodology included the following:

- » Review of the initial feedback from the early stage consultation
- » Population and Demographic Analysis
- » Understanding the housing demand
- » Housing supply including the consideration of the existing land use framework
- » Opportunities and constraints to delivery of housing and identification of key release areas and yield analysis to determine capacity
- » Identification of preferred options to meet the forecast demand for housing to 2036
- » Consideration of 38 sites that had, over the past 10 years, been identified by Council or land owners as land that could be considered for housing
- » Recommendations for release of additional residential land including the planning mechanisms to deliver the land

The Draft Strategy was considered by Council in December 2018 and placed on Public Exhibition.

1.4 First Public exhibition of draft Strategy

The Draft Strategy was placed on public exhibition by GMC between 10 January and 22 February 2019.

Draft Strategy and Exhibition Process (Stage 4)

On 18th December 2018 Council resolved to place the Draft Strategy out for public exhibition and invite submissions from interested persons. This exhibition period was between 10 January and 22 February 2019. Two drop-in sessions were hosted by GMC at Goulburn and Marulan for the Draft Strategy exhibition. Details as follows:

1. **Marulan Drop In**
5 February 2019 2pm-6pm
Marulan Community Hall 70 George Street, Marulan
2. **Goulburn Drop In**
11 February 2019 2pm-6pm
Council Chambers 184 Bourke Street, Goulburn

During the public exhibition period 33 submissions were received, six from Agencies, and 27 from members of the public. These submissions are summarised in **Table 2**, below. A map indicating the area to which the submission relates has been provided in **Figures 1 and 2**. Many of the submissions relate specifically to the consideration of the 38 Opportunity Sites provided by Council. The Draft Strategy included the Opportunity Sites Assessment as a separate Appendix (D). **Appendix D** Key Sites Assessment should be read in conjunction with this Consultation Report.

The Draft Strategy was amended following the initial exhibition period in response to submissions and the desire to more thoroughly address rural lifestyle development opportunities on large lots.

Summary of Public Submissions

Table 2 Overview of Public submissions during First Exhibition

No.	Submitter/Precinct	Issues Raised
	Precinct 2 Run 'O' Waters	
8	Paige Batchelor 6 Bowerman Rd Run'O'Waters <i>Not an identified site</i> Precinct 2 Run 'O' Waters (rural north)	Currently RU6 Transition with 10 Ha LSZ. Suggests extending 2,000 sqm from Run'O'Waters to Gurrundah Rd for small to medium rural residential lots. This would allow people to move into the area while retaining the feel for country life while living close to town. Response/Comment: A key objective of the Strategy is to identify and protect land for the delivery of the housing needs to 2036. In particular, this includes identifying opportunities for serviced residential land. The constraints to the expansion of the urban fringe are significant. This site has been included in the area considered for serviced resident land in the medium term. The constraints through the precinct, including slope and biodiversity will likely influence actual lot sizes but a 700sqm minimum is recommended.

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No.	Submitter/Precinct	Issues Raised
35	<p>Steve Bray/ 189 Gurrundah Rd, Run'O'Waters</p> <p><i>This is identified as Site 37.</i></p> <p>Precinct 2 Run 'O' Waters (rural north)</p>	<p>Site is currently LZN RU6 Transition + LSZ 10 Ha. The site is 10 hectares in size. Submission proposes change to 2 Ha (LSZ).</p> <p>Response/Comment: This area has been identified as suitable for large lot residential development. The issue will be timing and the orderly development of this and adjoin land.</p>
23	<p>Elton Consulting for Stewart Thompson/ 65 Foord Rd Run'O'Waters</p> <p><i>This site is identified as Site 4.</i></p> <p>Precinct 1 and 2 Run 'O' Waters</p>	<p>Currently RU6 Transition LZN + 2 Ha & 10 Ha LSZ. Proposes R5 Large Lot Residential LZN & E2 Env Lvg + 1-2,000 sqm + 10 Ha LSZ. Requests that the 131.2 Ha site be identified for 'Future Investigation' as categorised by the DHS. The submission also recommends that the site be included in the Council led Planning Proposal to amend the GM LEP 2009 to: Rezone the land from RU6 Transition to R5 Large Lot Residential and/or E2 Environmental Living; reduce the LSZ of Lot 337 and Lot 10 from 1 Ha to 1000sqm-2000sqm (depending on infrastructure); and amend the Terrestrial Biodiversity Map to more accurately reflect ecological/biodiversity values of the site and adjoining properties.</p> <p>The submission also includes a Preliminary Draft Subdivision with an estimated lot yield totalling 40-80 residential lots comprising: 40-80 residential lots (1-2 Ha); a couple of 5 ha lots and a 10 ha lot. A draft Concept plan is included that aligns with their ecological assessment of the site</p> <p>The site can be connected to water and sewer but requires significant works to make these connections (water and sewer are not at the property boundary).</p> <p>Response/comment: The area to the West of Goulburn was initially disregarded, primarily due to the biodiversity constraints and the ability to service the land. In addition, the amount of land required for residential development to 2036, in the draft Strategy, could be accommodated to the north of Goulburn.</p> <p>It is still the case that there is land suitable, and unconstrained in the Middle Arm precincts. However, there are short term capacity issues in terms of the existing water and sewer and major upgrades will be required.</p> <p>As a result, further investigation has been undertaken to look at the suitability of the Run 'O' Waters Precincts to accommodate serviced urban land with minimum lot sizes of 700sqm. Where investment in infrastructure is required council should seek the most efficient use of those assets (water, sewer, roads). To that end, delivering fully serviced land with a 700sqm is a much more desirable outcome for council who will</p>

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No.	Submitter/Precinct	Issues Raised
		<p>be responsible for the ongoing maintenance of those assets.</p> <p>In addition, having a second development front may also provide choice and diversity.</p> <p>Following a review of the biodiversity constraints by Ecological Australia, and further investigation of the capacity of the water and sewer this area has been re-visited.</p>
	Precinct 3 Baw Baw	
19	<p>Con Toparis/ 11 Gurrundah Rd & 59 Foord Rd Goulburn</p> <p><i>Lot 335 is an identified site (Site 8).</i></p> <p>Precinct 3 Baw Baw</p>	<p>Currently RU6 Transition LZN + 2 Ha LSZ. Proposes 2,000 sqm LSZ or Retirement Village.</p> <p>Response/Comment: Water is nearby but sewer is 250 metres away. Site is contiguous to existing R5 zoning.</p> <p>The Baw Baw Precinct should be retained as transition. Development of this precinct should be limited to avoid further fragmentation.</p> <p>The development for the purpose of a Retirement Village is prohibited in the zone. There are alternative sites where this form of land use is permissible.</p>
25	<p>Alex and Jan Weir/ 70 Gurrundah Rd Goulburn</p> <p><i>This site is identified as Site 22</i></p> <p>Precinct 3 Baw Baw</p>	<p>Currently RU6 Transition LSN + 10.16 Ha LSZ. Was proposed as part of Amendment 2: Not included because High Conservation Value; insufficient water and sewer infrastructure; and drainage (to Wollondilly River). Proposes R5 Large Lot Residential with a minimum lot size of 2,000 sqm. As does submission #22, this submission compares the site with nearby sites (8 and 10) because whereas Sites 8 and 10 are supported for rezoning, Site 22 contains minimal biodiversity (nil present according to Table 1 Biodiversity Constraints Analysis) and no heritage items and that site 10 is immediately adjacent to an existing subdivision. The submission also considers that it is favourable against the Additional R5 Criteria (Appendix 4.8) and would provide a gradual density transition from the existing urban area to the rural zone. The Weir's state that the site is unhindered by constraints as it has town water and is serviced by school bus routes, power, broadband, sealed roads and waste management services. The submission says that the site is capable of supporting lots greater than 2,000 sqm with an on-site wastewater management system.</p> <p>Response/Comment: Generally agree that the site could support large lot residential development 2ha-5ha. However, in the long term the area is better placed to provide serviced residential land. In the interim, the Baw Baw Precinct should be retained as transition. Development of this precinct should be limited to avoid further fragmentation.</p>

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No.	Submitter/Precinct	Issues Raised
	Precinct 4 Sooley	
28	Precise Planning/ 515 Crookwell Road Kingsdale (Site 12) Precinct 4 Sooley	<p>Currently E3 Environmental Management LZN + 100 Ha LSZ. Proposing R5 Large Lot Residential LZN with 4,000 sqm-2 Ha LSZ (<i>but not farms</i>). HS recommends RU6 Transition LZN and retain 100 ha LSZ. A concept plan has been provided in line with proposal. The submission emphasises current demand (based on discussions with Real Estate agents) for Rural Residential 'Lifestyle' lots and the attraction (and retention) of a specific socio-economic group (complete with a high disposable income) should be a priority. Submission restates (from HS) <i>site is unconstrained with only moderate biodiversity impacts in some place however part of the site is mapped as Strategic Agricultural Land in LEP. Submission makes the site ideal for planned transition from urban to rural and will make a statement as to rural character upon entry from that direction. Site 6 (Chinaman's Lane) is located immediately adjacent which is supported (in HS) for 1,500 sqm lots.</i></p> <p>Submission recommends transition of proposed lots would be better created now rather than in future. <i>Real Estate agents have indicated there is numerous 2,000 sqm lots available but very little stock (and great demand) of 4,000, 1 Ha and 2 Ha lots. Submission says these should be created for the Lifestyle choice of existing aspiration land owners.</i></p> <p>Housing Demand: pointing to success of Run'O'Waters.</p> <p>Economic Case: high income earners (target purchasers) <i>are often employers and have high disposable income to invest in a range of local investments, often employment generating and it is vital that land be provided to this group of people.</i></p> <p>Serviceability: The submission points out that long term the site could be service by sewer (but in the meantime this would be uneconomical) but <i>helpfully, lots of the size proposed can accommodate onsite effluent disposal.</i></p> <p>Responses to SETRP:</p> <p>Goal 1 A connected and Prosperous Community Directions 8.1 & 8.2 (Agricultural Lands); <i>Site is in vicinity of Strategically Important Agricultural Land and if the site is zoned RU6 Transition it would sterilise the subject site for Intensive Agricultural Use. This land could be viewed as interface through R5 LLR.</i></p> <p>Goal 2 Diverse environment with biodiversity corridors Directions 14.2, 14.3 and 15.1: <i>The site is not an area identified as high environmental values and if rezoning proceeds then intensive ecological investigations, including avoidance, minimisation and offsetting would be undertaken. Direction 18.1, 18.3 & 18.4 Water catchments and water cycle management: A more</i></p>

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No.	Submitter/Precinct	Issues Raised
		<p><i>intensive analysis will be required including the setting of OSD and water quality targets to protect downstream water from adverse impacts. An integrated water cycle management strategy could be prepared in the event the proposal proceeds.</i></p> <p>Goal 3: Healthy and connected communities: Directions relate to <i>inter alia</i> Heritage and Neighbourhood Planning Principles.</p> <p>Goal 4 Environmentally Sustainable Housing choices: Directions for Housing Strategies and Principles providing housing choice in the form of villa's and in strategic centres and opportunities for seniors housing.</p> <p>The submission concludes that the owner objects to the HS recommendation that the subject site be rezoned RU6 Transition and retaining of 100 H LSZ. For 2 reasons: 1) <i>There is no way of predicting when the subject site for this purpose (?) whilst demand for larger lots remains unaddressed and unfulfilled and the owner would be left in limbo, and 2) The RU6 transition zone permits extensive agriculture but not intensive ag (livestock or plant). Extensive agricultural pursuits, and other permissible uses, are unviable on this site because of the necessary investment required to achieve viability and other forms of ag that require less land and (sic) prohibited. The imposition of the RU6 Transition and the retention of the 100 Ha LSZ, whilst waiting for some indeterminate future time when the site may be required for residential development, will place a heavy burden on the landowner.</i></p> <p>Response/Comment: Additional work has been undertaken to understand the demand/supply for rural residential/large lot residential land. A more detailed precinct approach has been taken to determine the opportunities for large lot residential as well as serviced residential land.</p> <p>Agree with the submitter that large lot residential provides a housing choice and as a result further consideration have been given to where this form of development could be accommodated.</p> <p>Given the constraints in this precinct, there are other areas better suited to the delivery of large lot residential land.</p> <p>Further, the submission highlights the BSAL and suggests that if the site is zoned RU6 Transition it would sterilise the subject site for Intensive Agricultural Use. Retention of agricultural land is a key objective of both DPIE and NSW DPI.</p> <p>Agree with the submitter that the Transition zone is not suitable and recommend that the site be retained as E3.</p>

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No.	Submitter/Precinct	Issues Raised
30	<p>Chris Parlett (Parlett & Murray family) (18 Mar 2019) Further joint submission from SCCS (21 February 2019) 407 & 457 Crookwell Road, Kingsdale</p> <p><i>This site is identified as Site 6.</i></p> <p>Precinct 4 Sooley</p>	<p>Currently RU6 Transition LZN + 10 Ha LSZ. Proposed since 2006. Proposing lots of 1,500 sqm (consulting with council staff – 700 sqm). Submission states land is identified as the <i>transition zone</i> in the <i>Future Urban Area</i> whereas land on eastern side of Crookwell Rd is Proposed Urban Release Area (Short Medium term). They would like to be identified as <i>Proposed Urban Expansion Area</i> (short to medium term release). They are flexible in terms of lot size (700-1500 sqm). Submission from SCCS states services have been extended to the boundaries of the site by the urban expansion opposite to the south and east. They also identify that services are currently further away from the <i>Proposed Urban Release Area</i> than they are from the subject site. They conclude not unreasonably that the inclusion of the subject site in the <i>short to medium term urban release</i> area would be a more orderly and logical planned outcome. SCCS also note the constraints of Sooley Dam, that the HP Gas pipeline passes through the northern portion of the subject site and that Council is making its own enquiries in this regard. SCCS also identify however that the HP Gas pipeline also passes through the <i>Proposed Urban Release Area</i>. In view of this, SCCS submit that their clients should not be considered as unsuitable for inclusion in the <i>short to medium term release</i>. With regard to Sooley Dam, SCCS submit that stormwater would flow away from the Sooley Dam Catchment to the east and south therefore no impact on Sooley Dam water quality from urban development.</p> <p>The submission from SCCS also provides a checklist of the subject site against the criteria identified in Section 2.1.1 of the Opportunity Sites Assessment (but none for Section 2.1.1 Additional Criteria for Large Lot residential Land). Against the criteria submitted it provides a favourable outcome. In particular it notes that a <i>Flora and Fauna</i>, submitted in June 2010 for a previous rezoning submission, identifies the land as having minimal impact upon flora and fauna issues. With regard to biodiversity fragmentation, they state that the land has been significantly modified over a long period of time however while it is currently being used for agricultural purposes, they believe the extent of the proposed urban expansion area will have minimal impact on Rural Planning and Subdivision principles contained in the Rural Lands SEPP. SCCS submit that <i>appropriately selected minimum lot sizes</i> will contribute to housing affordability and suggest a LSZ of 700 sqm. The last of the criteria consider that the short to medium term release <i>would contribute to the orderly and responsible pattern of urban expansion and thus minimise conflict with agriculture and primary industry.</i></p>

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No.	Submitter/Precinct	Issues Raised
		<p>Response/Comment: But for the BSAL and this area is suitable for urban development, however, while ever this area remains mapped as bio strategic agricultural land, it will impede the orderly development of the area. For this reason it was tagged as a future urban area and this remains the case. Further investigation has been undertaken at a precinct level to better understand the opportunities for serviced land that is unconstrained.</p>
17	<p>Lynette Thurbon/ 486-512 Crookwell Road, Kingsdale</p> <p><i>This is not an identified site but is located between Site 26, Site 12 and Site 2.</i></p> <p>Precinct 4 Sooley</p> <p>Precinct 5 Middle Arm West</p>	<p>Currently RU6 Transition & E3 Env Management + 10 Ha and 100 Ha LSZ respectively. Notes proximity to Mary's Mount and Tenerife Subdivisions. The owner would be amenable to a zoning change to residential and would appreciate feedback in relation to any zoning changes.</p> <p>Response/Comment: In reference to Middle Arm West refer comments below.</p> <p>In relation to Lot 2 DP29253, the lot is in the Sooley Precinct and it is split by the gas pipeline and watercourse. Given the extent of land already identified by the RU6 Transition zone in the north and west of Goulburn, rezoning for this land is not supported at this stage. Refer Precinct Map</p>
	Precinct 5 Middle Arm West	
4	<p>Urbanism/ Crookwell Rd Goulburn, Lots 1-4 'Mistful Park'</p> <p><i>This is an identified site (Site 26)</i></p> <p>Precinct 5 Middle Arm West</p>	<p>Site is currently mostly E4 Environmental Living & R2 Low Density Residential with minimum lot sizes of 10 Ha & 700 sqm respectively. Council resolved in-principle support to rezone 'Mistful Park' (Site 26). Final HS should address inconsistency between 'Site Assessment Table' (Appendix) supporting 700 sqm lots and Corresponding table (p7) of HS says 'not supported' recommending Council 'Consider the potential for residential development in the context of the expansion of the urban area subject to a site specific biodiversity assessment'. Request the Appendix table be amended to reflect Council's 'adopted position'.</p> <p>Site Specific Biodiversity Assessment: One has been done by Woodlands Environmental Management (7 August 2017). SSBA found the 24% of the sites White Box/Yellow Box Blakely's Red Gum Woodland was in low to moderate condition (not identified as high conservation value) and is not identified as Terrestrial Biodiversity in GM LEP 2009. Development Standards could be applied to the 24% (Larger Lot Sizes) and this would improve the management regime of the area and dispense with the need for offsets for any loss of EEC's. Request Appendices be amended to reflect</p>

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		<p>biodiversity assessment has been undertaken and that further consultation with OEH following a Gateway Determination is appropriate.</p> <p>Response/Comment: This site has been reconsidered as part of the post exhibition work for the Strategy. The site is highly constrained in terms of biodiversity. It is acknowledged that previous work has been undertaken in term of Biodiversity Assessment, and this supports the Strategy finding.</p> <p>Notwithstanding the biodiversity issue, the site is otherwise well suited to urban development. It is contiguous with the existing residential zone. A detailed BDAR and BAM assessment under the Biodiversity Conservation Act is required to support the rezoning of this site and it is agreed that this could be undertaken as a Post Gateway task given the broader strategic merit of the site for urban development.</p> <p>Refer to Precinct 5 Middle Arm in the revised Strategy</p>
13	<p>Ken & Denise Hogan/ 157 Middle Arm Rd Goulburn</p> <p><i>This is not an identified site. The nearest identified site is Site 1 (see also submission 15 and 22).</i></p> <p>Precinct 5 Middle Arm West</p>	<p>Currently LZN RU6 Transition + LSZ 20 Ha (AB2). Proposing 2 Ha Lifestyle Lots (Un-serviced). This addressed the factors affecting demand and supply and cites the DUFHS in several places, in particular the potential shortage in supply of R5 land around Goulburn and the Strategy's failure to identify suitable land around Goulburn to take up this shortfall.</p> <p>In its response to Constraints and Land Suitability this submission notes that the Strategy identifies the land to the north of Goulburn as devoid of 'other major constraints' such as flooding and the suitability of this land for Rural Residential development in terms of Topography, Biodiversity & Drainage, Bushfire Hazard, Cultural Heritage and reticulated water and sewer. It then goes on to cite Direction E of Section 7 Strategic Actions and responds to the 'Additional Criteria for Rural Lifestyle Development criteria (contained in Appendix E of the Site Assessment - Opportunity Sites report) demonstrating support for the proposed amendment.</p> <p>The submission is clear in what is being requested and not unjustified (or unsubstantiated) in this request, based on the evidence it presents.</p> <p>Response/Comment: This submission highlights the shortfall in the Draft Strategy in terms of addressing the need for additional large lot residential development opportunities.</p> <p>In response the Strategy has been reviewed to include a more detailed Precinct based approach to the identification of housing opportunities, particularly on the urban fringe.</p>

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No.	Submitter/Precinct	Issues Raised
		<p>Additional work was undertaken to determine the current supply of large lots (2ha) and factors that need to be considered in the release of additional land for this purpose. Refinement was also made to the criteria, in particular highlighting those areas that are considered key in terms of the long term future development of Goulburn.</p> <p>In terms of this site itself, is in an area that, in the long term, is important to retain for urban purposes.</p>
15	<p>Antonio, Peter & Salvatore Graziano/ 153 Middle Arm Rd Goulburn</p> <p><i>This site is not an identified site however Site 1 is the nearest identified site (see also submission 13 and 22).</i></p> <p>Precinct 5 Middle Arm West</p>	<p>Currently RU6 Transition LZN + 20 Ha LSZ. Proposes R5 Large Lot Residential LZN + 4,000 sqm LSZ.</p> <p>The owner's advise that they have held a meeting with adjoining landowners to make a formal submission to the DUFHS and that the owners are willing to work with their neighbours (125 & 157) who also seemed to want to work together. The purpose of their submission is to provide Council additional Information to demonstrate that there is a real need to rezone the subject site to R5 Large Lot res (2 ha). It also seeks to demonstrate that there is a clear shortage and is a logical and sequential position with minimal constraints and, together with adjoining landowners create a new large lot residential precinct.</p> <p>Response/Comment: refer comments above</p>
22	<p>Milestone Pty Ltd/ 125 Middle Arm Rd, Middle Arm</p> <p><i>This site is not an identified site (see also submissions 13 and 15) but is located near to Sites 1 and 5.</i></p> <p>Precinct 5 Middle Arm West</p>	<p>Currently RU6 Transition LZN + 20 Ha LSZ. Proposes R2 Low Density Residential and 700 sqm LSZ. The submission seeks clarification on the timeframe for overarching Planning Proposal to rezone the Urban Release Area, they understand to R2 Low Density Residential, and intends to subdivide following rezoning.</p> <p>The submission quotes figures from the SETRP and ticks (P) that the proposed Amendment would comply with five (5) of the twelve (12) objectives of the strategy from Section 6 The Priorities. The submission identifies that the subject site is contiguous with the Draft Proposed Urban Release Area and quotes the opening sentence from the Northern Development Front (p113) that the subject area <i>offers the most suitable location for the majority of the greenfield housing supply.</i></p> <p>The submission concludes that there is planning merit to support the rezoning and future subdivision on the basis that the proposal will: support the key aims of the Regional Plan; Abuts the northern side of the 'Proposed Urban Release Area'; Is of similar size and dimensions to two 'opportunity' sites to rezone to R2 Low Density Residential; Is free from significant environmental and topographical constraints and is free of hazards (flooding, contamination, landslip and erosion); Will not lead to adverse impact or land use conflicts related to agriculture, forestry, industry and</p>

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		<p>mining; Is not an area of critical habitat loss and fragmentation; It is well within the 'urban fringe' area as defined in the DUFHS; It is accessible via the existing road network and is within a short 5 minute drive to the Goulburn CBD.</p> <p>Subject to In-Principle support of Council Officers to nominate the site as a candidate for rezoning, Milestone intend to proceed with the Planning Proposal as soon as practicable and in the first instance meet with Strategic Planning staff for a Pre-Lodgement Planning Proposal Meeting. Clarification is sought regarding Council's timeframe and Intentions so their client can make an informed decision whether to proceed with a Planning Proposal application to Council.</p> <p>Response/Comment: Refer to other comments above. Generally, the Middle Arm West Precinct is considered suitable for future residential development. The issue will be undertaking the development in a master planned and coordinated manner and the timeframe for when the land is required.</p>
36	<p>Laterals/ 225 Middle Arm Rd, Middle Arm</p> <p><i>This is not an identified site</i></p> <p>Precinct 5 Middle Arm West</p>	<p>Site is currently zoned RU6 Transition + 20 Ha LSZ and has an area of 54 Ha. Proposing to rezone to allow lot sizes of 2 Ha for Rural Lifestyle Development.</p> <p>Response/Comment: Refer to other comments above. Generally, the Middle Arm West Precinct is considered suitable for future residential development. The issue will be undertaking the development in a master planned and coordinated manner and the timeframe for when the land is required.</p>
	Precinct 8 Gorman Road	
2	<p>James Hoskins/ 69 Gorman Rd Goulburn</p> <p><i>This is not a previously identified site but is located adjacent to Site 39.</i></p> <p>Precinct 8 Gorman Road</p>	<p>Notes the resolution (2018/584) to enable large block sizes at 534 Taralga Rd (across the river) and the identified land (Site 39) adjacent to the subject site. The suggestion is to rezone the adjacent land for Rural Residential development with an LSZ of 2Ha (currently zoned SP2 with no LSZ) as suggested by the Draft HS (Site 39). Also seeks a reduction for his site on Gorman Road to 2ha min lot size.</p> <p>Response/Comment: This area is unlikely to be developed for urban residential greenfield housing due to biodiversity limitations, bushfire and limitations to infrastructure (water/sewer) provision.</p> <p>The existing RU6 Transition zone has been identified in the revised Strategy as future large lot residential.</p>

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No.	Submitter/Precinct	Issues Raised
6	Lola Marmont/ 22-28 Gorman Rd Goulburn <i>This is an identified site (Site 27).</i> Precinct 8 Gorman Road	Currently RU6 Transition + 10Ha LSZ. Proposes to revise LSZ to 2ha for her 4.4 Ha property. Property has sealed road, town water (+tank and bore). Response/Comment: Refer comment above
9	Noel and Renate Johnson-Barrett 88-96 Gorman Rd Goulburn Precinct 8 Gorman Road	Currently RU6 Transition + 10 Ha LSZ. Proposes 2 Ha LSZ. Wants to assist meeting anticipated housing demands. Their land offers good access to town centre. Response/Comment: Refer comment above
12	Brian Soley/ 201 Gorman Rd Goulburn Precinct 8 Gorman Road	Currently RU6 Transition LZN + 10 Ha LSZ. Proposing lot sizes in Gorman Road area be reduce to 2Ha. Wants to enjoy rural setting however acknowledges large lot sizes are hard to maintain and are not always affordable when wanting to buy. Response/Comment: Refer comment above
16	Doug Rawlinson/ 36 Gorman Rd Goulburn Precinct 8 Gorman Road	Currently zoned part E3 Environmental Management & RU6 Transition with a LSZ of 100 Ha and 10 Ha respectively. Proposes 2 Ha LSZ. The submission advises there are 10-12 hectare 'farms' and he would like to change the zoning to enable him to 'subdivide off' 1 or 2 smaller allotments. Response/Comment: Refer comment above
Precinct 9 Mt Grey East		
3	Jenni & Norman Aubrey/ 159 Rifle Range Rd Goulburn <i>This is not a previously identified site. It straddles the Hume Highway</i> Precinct 9 Mt Grey East and 10 Mountain Ash	Currently Single Lot with split zone (RU6 and E2) by Motorway and want amendment to RU6 Min Lot Size to subdivide 40ha on south eastern portion. Response/Comment: The split zone clause in the LEP does not assist with the subdivision of this site which straddles the Hume Highway. The site is slightly too small to allow for a two lot subdivision using Clause 4.6 of the southern side zoned RU6 also. The Mountain Ash Precinct is almost entirely outside the identified urban fringe. The RU6 zone is unlikely to be considered for serviced urban land. The current MLS is 20ha. It is recommended that the LEP be amended to enable the southern portion of the site to be subdivided to create a separate lot.
Precinct 10 Mountain Ash		
27	TCG Planning/ Mountain Ash Rd Brisbane Grove Site 25	Currently RU1 Primary Production LZN + LSZ of 100 ha. Submission proposes R5 Large Lot Residential with a LSZ of 2 ha. In 2015, DPE recommended (2ha) (LLR) PP be resubmitted following review by Council of take up and supply of 2-20 ha

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	Precinct 10 Mountain Ash	<p>rural lifestyle lots (KDC Report). Site also has lapsed Concept Plan Approval (CP 06_0266) for Distribution Hub. Adjacent land zoned RU6 Transition with 20ha LSZ. Submission has concerns that Elton's consider the site is constrained by significant areas identified as having high conservation value (Elton's also did not support other site 11, 13 and 20) on the basis of high biodiversity value.</p> <p>TPG also has concerns that Ecological study was a desktop study only with no ground truthing and that Ecological focussed their assessment on sites to the north and west of Goulburn (specifically Site 26 – Mistful Park) It also wants to be the subject of a specific biodiversity assessment to consider opportunity for offsets. TCG are of the opinion that all 39 sites should have been the subject of site specific ecological analysis. TCG quote the DG's Assessment Report for CP 06_0266 that the subject site is highly modified and degraded as a result of clearing, grazing, pasture improvement, agricultural practices and...site supports native pasture communities of low biodiversity. TCG consider dismissal of the site for biodiversity reasons as ambiguous and request Council undertake further investigations regarding biodiversity before concluding that the entire site is not suitable for large lot residential.</p> <p>TCG notes Strategy's acknowledgement of demand for LLR blocks (1,000-5,000 sqm), however note that the Strategy only makes provision for them north of Marulan and none in Goulburn. TCG refutes that the release of Large Lot Residential land would compete with and compromise the future delivery of General and Low Density residential land. TCG consider the land at Mountain Ash Road would not conflict with the required residential greenfield sites (such as Run'O'Waters) and not compromise this delivery. They also consider that there is adequate demand whereas there was only one site (Site 10) put forward with an area of 21 ha's (86 lot yield) and that their subject site would not necessitate discussion with numerous landowners. TCG are of the opinion that the draft strategy should not proceed to finalisation without further detailed investigation into the market demand. TCG considered the Strategy's Objectives, principles and Criteria for identification of land, that there was no justification for extending the urban boundary to the north and west by the Hume Highway, while not considering extending it to the south east, apart from using the significant piece of Infrastructure (Hume Motorway) and no other limiting factor (in their view) to define clear city limits. TCG conclude that progression of an amendment to GM LEP 2009 and finalisation of the Draft GMUFHS is premature. They also conclude that investigation of ecological values is</p>

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No.	Submitter/Precinct	Issues Raised
		<p>inadequate and has instead focussed on a desktop analysis of sites in the north western sector of Goulburn. They consider that the brief should be extended to include further consideration of the south eastern lands. They also conclude that the future potential growth of Site 25 should not be dismissed on the basis of ecological value alone without considering mitigation strategies which could be incorporated into a future subdivision design. TCG recite the comments regarding the Distribution Hub to support this. They reiterate that the site has a high level of accessibility and would assist in meeting the future large lot housing requirements of Goulburn.</p> <p>Response/Comment: This submission highlights the existing planning proposal initially supported by Council in 2015. At that time DPE required Council to demonstrate the need for additional rural residential land.</p> <p>DPE stated that consideration of the 2-20ha lot delivery should be part of a review of the rural lands strategic framework.</p> <p>Council commissioned KDC to undertake a review of the supply of rural residential land 2-20ha. This review found that there was no string evidence to indicate that there is a higher demand for, or lack of supply of, rural residential lots in the region.</p> <p>In response to the biodiversity issues raised, it is acknowledged that the site (25) was initially eliminated based on the desktop biodiversity assessment. This has subsequently been reviewed, although still not to individual property level. To that end, however, the submission and supporting correspondence from Mecone which included a High Level Preliminary Ecological Assessment has been undertaken by Pat Guinane, a Senior Ecologist with Macrozamia Environmental (BAM Assessor Accreditation undertaken in July 2019, provide sufficient evidence to conclude that the biodiversity constraints are limited.</p> <p>The remaining constraint is noise from the motor racing activities to the south west. If these issues could be overcome, the Mountain Ash Precinct has the potential to provide large lot residential development if demand is established.</p>
33	<p>Neville Burrows via Nadia Kitching/ Mountain Ash Rd</p> <p><i>This site is identified as Site 25</i></p> <p>Precinct 10 Mountain Ash</p>	<p>Requests serious consideration be given to rezone the subject land (DP70346, DP126040, DP731427, DP 779194, DP811954 and DP835278) to permit 2Ha home sites.</p> <p>This submission is basic in that it simply requests the LSZ of the above DP's be revised to allow 2 Ha lots.</p> <p>Response/Comment: Refer comment above.</p>

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No.	Submitter/Precinct	Issues Raised
14	<p>John Taylor/ 46 Mountain Ash Rd Brisbane Grove</p> <p><i>The suggested area for rezoning is in the vicinity of Site 25</i></p> <p>Precinct 10 Mountain Ash</p>	<p>Currently RU6 Transition LZN + 100 Ha LSZ (AD). This submission is intended to be general in nature though it suggests that land to the south of Goulburn between Braidwood Road and Lansdowne Bridge would be suitable for R5 Large Lot Residential. It also suggests that the Strategy supports the provision of rural residential housing on up to 2 hectare lots and is supported by Strategy commentary that people are choosing to relocate to Goulburn for larger lots and more space. It then surmises that the Strategy does not support larger lots.</p> <p>This submission is critical in that it does not look for opportunities for large lots, only at the sites already put forward and is sceptical of the basis for the rejection of the identified large lot sites. It also considers that Lifestyle lots will attract "Treechangers" and their demographic will boost the economy and population. The submission suggests the strategy fails to meet the spirit of a resolution from (19) July 2016, that prioritised a rural housing strategy, by not coming up with a strategy to meet known demand for larger blocks.</p> <p>The submission concludes that he can have no confidence in making his submission when some of the data in the strategy is blatantly wrong and when things from various workshops have just been ignored.</p> <p>Response/Comment: This submission highlights the shortfall in the Draft Strategy in terms of addressing the need for additional large lot residential development opportunities.</p> <p>In response the Strategy has been reviewed to include a more detailed Precinct based approach to the identification of housing opportunities, particularly on the urban fringe.</p> <p>The site itself is identified as having biodiversity constraints. It is also within an area identified as being impacted by noise from the motor racing activities to the south west. If these issues could be overcome, the Mountain Ash Precinct has the potential to deliver large lot residential development if demand is established.</p>
21	<p>Michelle Hazelgrove/ 94 Rosemont Rd Goulburn</p> <p><i>This site is not an identified site and is in proximity to Site 25.</i></p>	<p>Currently RU1 Primary Production LZN + 100 Ha LSZ. Proposes mix of 5 (2 Ha), 10 (4 Ha), 15 (6Ha), 20 (8 Ha) and 25 (10 Ha) lots.</p> <p>Identifies their holding as Mountain Ash Road, Gundry and is at the periphery of the study area. The submission advises that the subject land is in the town boundary. Near this area on Mountain Ash Rd a developer has acquired the land and wants to do 5 acre lots which are in great demand close to Goulburn. The submission states that the study says this 'area' is</p>

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	Precinct 10 Mountain Ash	<p>not to change but the submitter believes it would be in Goulburn's interest and economic development to release this area as a mix of 5, 10, 15, 20 and 25 acres close to town.</p> <p>Response/Comment: As noted above consideration of the 2-20ha lot delivery should be part of a review of the rural land strategic framework.</p> <p>Refer to other comments above.</p>
37	<p>Laterals/ 2 Brisbane Grove Rd, Brisbane Grove</p> <p><i>This is Site 11</i></p> <p>Precinct 11 Brisbane Grove</p>	<p>'Alfarthing' (Lots 61-64 DP 976708, Lots 71-77 DP 976708 and Lot 60 DP 1090981) The site is currently zoned RU6 Transition + 1Ha LSZ with an area of 34 Ha. This submission includes a number of maps including a proposed subdivision map. It is also supported by a biodiversity Assessment prepared by Woodlands Environmental Pty Ltd.</p> <p>Response/Comment: Noted. Additional constraints assessment at the Precinct level generally supports the suitability of part of the site, but for the abattoir buffer and soil capability in terms of agricultural land. As with other Precincts, the issue will be one of demand/supply and timing. It does not follow that all land that is suitable will be identified for development in the short/medium term.</p>
39	<p>Kingsdale Consulting Lot 4 DP 1163244 16 Nicole Place Goulburn</p> <p>Precinct 13 Garfield</p>	<p>The parcel is split zoned R5 and E4 with a corresponding split MLS of 2,000sqm and 8,000sqm respectively. Request that Council consider amending the MLS on the E4 Environmental Living zone from 8,000sqm to 2,000sqm.</p> <p>The submission highlights the generalisation of the Garfield precinct description and that this is inaccurate when considering the Nicole Place and Carr Street extent of the precinct which is must more aligned with the outer fringe areas in terms of character and land use.</p> <p>Response/Comment: Agree that the general nature of the description of the Garfield Precinct cannot be accurately applied to this area.</p> <p>Council should consider an amendment to both the zone and the MLS on the E4 zoned land fronting Carr Street having regard to the scenic amenity, environmental values and access to water and sewer as part of the consideration of the adjoining Run 'O' Waters (rural north) Precinct.</p>
Marulan		
5	<p>Tony Jabbour/ 321 George St Marulan</p> <p><i>This is not an identified site but is located between Site 30 and the Hume Highway.</i></p>	<p>Currently RU2 Rural Landscape zone and 100 Ha minimum lot size. Wants to be included in adjacent Additional Large Lot Residential Opportunity notation. Considers site suitable for inclusion in HS. Site is described as having 1km of frontage and good access to Hume Highway, power, reticulated water and phone</p>

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No.	Submitter/Precinct	Issues Raised
	Precinct Marulan North	<p>services available, is flat and cleared of trees and has good proximity to the town centre and highway and would benefit from residential and highway retail zone uses. Excluding the land would result in it becoming an isolated 'island' site. Would like to work with Council to rezone to deliver staged housing lots and highway retail zone uses.</p> <p>Response/Comment: The revised Strategy identifies part of this site in the future urban residential land in the longer term.</p>
7	<p>Tod Anderson/ 194 Brayton Rd Marulan (not 152 as in submission)</p> <p><i>This is not an identified site but is between Site 30 and the urban area of Marulan.</i></p> <p>Precinct Marulan North</p>	<p>Currently RU6 Transition zone + 100 Ha LSZ. Refers to Figure 2 and proposes to extend R2 zoning to meet their land. Proposed Additional Large Lot residential Opportunity is already over this site. Generally, support housing strategy.</p> <p>Response/Comment: Additional Large Lot Residential Opportunity notation already covers this site. There is limited opportunity for serviced residential development in Marulan and it is important that Council prevent the fragmentation of land to the north of Marulan to the extent that it would then be unviable to redevelop in the future.</p>
24	<p>Gunlake Quarries David Kelly/ 540 Brayton Rd Marulan</p> <p>Precinct Marulan North</p>	<p>Currently RU2 Rural Landscape + 100 Ha LSZ. Submission raises concern regarding proximity of Additional Large Lot Residential area to Ambrose Road Heavy Haulage Route used by Gunlake. This concern is raised in the context of the Mining, Petroleum Production and Extractive Industries SEPP 2007, Ministerial Directions (117's) and the South Eastern Tablelands Regional Plan (SETRP) which all have the objective that "future urban land does not encroach on existing mineral resources" (Direction 13 SETRP). Their concern is not only regarding the impact that their operations will have directly on future urban land uses (i.e Residential) but also the likelihood that these land uses will seek to connect to the Hume Highway via Ambrose Street. Gunlake state that this road is used 24/7 and is the direct link between the quarry site and the Hume Highway. Further this link road is intended to 'keep the vast majority of quarry traffic out of and completely avoid' residential land uses in and around Marulan. Gunlake further state that they are required to pay Contributions under Council's S94 Plan whereas this road was 'built and constructed' by Gunlake and also upgraded the intersection with the Hume Highway). Both of these actions was at their own volition. This identified transport route is now approved as an SSD consent (June 2017) for a max of 490 tm/day and any encroachment on this route would create a land use conflict that would sterilise a SS resource.</p>

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No.	Submitter/Precinct	Issues Raised
		<p>The submission from Gunlake notes that there was no identification of the Gunlake quarry or transport route to the proposed urban expansion area. Gunlake also notes the HS Criteria that urban expansion should avoid mineral resource locations. To this end Gunlake supports the recommendation to reject Site 18 from the Opportunity Sites list and also strongly recommends the support for Sites 30 and 33 be reconsidered.</p> <p>The submission from Gunlake provides 6 Criteria that could be adopted for site selection of current & future residential/urban land release areas.</p> <p>Response/Comment: Noted. The haulage route to the north connecting to the Highway has been identified at a precinct level. Additional constraints mapping has been shown to identify the mineral resources. Should development occur DCP controls for setbacks and limited access to haulage routes for subdivisions could be included.</p>
26	<p>Leonida Beltrame/ 307 George St Marulan</p> <p><i>This site is not an identified site but is located between Site 30 and the Hume Highway.</i></p> <p>Precinct Marulan North</p>	<p>Currently RU2 Rural Landscape LZN + 100 Ha LSZ. Proposes R5 Large Lot Residential LZN as per adjoining 'Additional Large Lot Residential Opportunity' land to the north west. Extensive frontage to Hume Highway. Surrounding neighbours have been included. Wants to know how her land can be included.</p> <p>Response/Comment: The Marulan North Precinct has been refined based on additional constraints mapping. Part of this site has been included.</p>
34	<p>Divals/ 21 Wilson Drive & Portland Avenue, Marulan</p>	<p>industrial precinct and abutment of Residential and Industrial uses (quarrying) at Suffolk Road Marulan (docs #1105513 + 1105449);</p> <p>21 Portland Ave is currently zoned IN2 General Industrial (+Nil LSZ).</p> <p>Submission wants to rezone this site IN1 because it appears to permit businesses such as 'Camcast' (?). They state IN1 land to the north adjoins residential and this to them appears 'back to front'.</p> <p>Response/Comment: Noted</p>
20	<p>Justin Kell/ LandTeam</p>	<p>Generally supportive.</p> <p>Submission suggests an area for Open Space (Site 26) while the HS makes little or no mention of complementary land uses (Commercial and Open Space LZN).</p> <p>Submission suggests the identified growth area of North Goulburn should be separately named to separate its identity from the remainder of Goulburn. It also suggests that Greenfield development is not for</p>

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No.	Submitter/Precinct	Issues Raised
		<p>everyone but acknowledge that it should be in suitable areas.</p> <p>Response/Comment: Noted. In order to need the housing demand to 2036 there will need to be a mix of infill and greenfield development.</p>
29	Tomasy Planning	<p>248 Highland Way (and Long Point Road) Marulan: Currently RU2 Rural Landscape + 100 Ha LSZ. Wants to be included in Strategy area and proposes Rural Residential development along Highland Way and Long Point Road. Submission refers to 'Glenrowan Green' (32 Caoura Rd Tallong) as comparable Subdivision. Glenrowan Green is RU5 Village LZN and 700 sqm LSZ. There is a 40 Ha and 10 Ha LSZ between the two properties. Requests inclusion in strategy as growth corridor between Marulan and Tallong. Makes 11 points in support of request. Site is not in close proximity to Marulan or Tallong. Site is not in proximity to other recently approved Subdivisions (referring to Glenrowan Green). Road frontage allows direct road access and can provide services without additional roads. Low bushfire risk (based on dated maps). Submission notes Ingleside was deferred from urban residential for bushfire reasons (the site is bushfire prone under new maps). Subject land is cleared of vegetation enabling development without interference with vegetation, natural species or flora and fauna. Site is natural growth corridor. There is already a substantial number of rural residential development, like Caoura Road, so would be consistent with existing character. Proximity to main southern railway line. Single ownership means land can cohesively developed. Site has the ability to meaningfully add to the housing stock.</p> <p>Response/Comment: This site is considered too remote to be reasonable considered as part of the Urban and Fringe Housing Strategy. Sufficient land has been identified within the immediate study area without the need to consider the suitability of more remove land.</p>
General		
18	Doug McIntyre	<p>General (development of north Goulburn): The submission states allowing future land releases towards Crookwell is not balanced and further makes the CBD the edge of Goulburn. Doug considers land on the southern side of Goulburn (the abattoirs and old wool washing site) is ideal for regeneration through urbanisation but these areas have been ignored.</p> <p>Also Doug considers the release of more land towards Crookwell does not take into account the impact on Crookwell residents who have to navigate through Goulburn on a regular basis. It suggests that a direct bypass to the highway from the Crookwell Goulburn</p>

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No.	Submitter/Precinct	Issues Raised
		<p>Road instead of navigating the maze of Goulburn back streets needs to have serious consideration.</p> <p>Comment/Response: The Strategy considered a range of constraints both natural and built to development in making recommendations in relation to the most suitable growth areas. Despite the perception of distance from the centre of Goulburn, the norther part of the city is the most suitable for future development.</p>
31	Trevor Ronald Lloyd	<p>General (Transport & Repurposing Shop fronts for Seniors Housing): This submission considers that Goulburn will increasingly become a dormitory suburb for Sydney and Canberra and the need for improved access to transport hubs from surrounding areas for onward movement to their final destination (eg Sydney and Canberra). It continues in liking to see a reasonably thorough discussion and proposals for the shire's transport requirements included in the HS. It recommends an 'easement' requirement for light rail, driverless cars and buses, particularly in support of major new subdivisions and smaller villages eg, Crookwell, Tarago, Taralga and Marulan. Consideration of existing but unused railway easements should also be included.</p> <p>It accepts that coordination with NSW Planning Departments and asks 'what is the regional transport plan for NSW?' The submission considers that retailing is a failing industry and suggests that contemporary retailing establishments could be repurposed to accommodation to bring much needed community activity to the centres of towns/villages. He considers that repurposed shopfronts could be used for the elderly they (the shopfronts) are generally close to public facilities such as hospitals and shopping precincts. For example, the single level Goulburn shopping malls could be redeveloped as multi story (sic) developments with residential dwellings above – such centres are more valuable for residential purposes than retail and are close to transport hubs and public facilities. Commercial interests will have views that merit transparent consideration. Because he's away from Goulburn much of his time, he thought the timeframe for discussion was very short and have not noticed any discussion regarding the housing strategy in the local press.</p> <p>Response/Comment: Noted. Recommended increase in density of housing in the centre of Goulburn via additional R3 Medium Density zone.</p>
32	Anglicare & Argyle housing	<p>Affordable and Social Housing: This submission provides a short history of Anglicare and Argyle's involvement in the Goulburn and wider community and a snap shot of the current housing market for</p>

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No.	Submitter/Precinct	Issues Raised
		<p>these sectors. An attachment shows waiting times for housing in Goulburn as:</p> <ul style="list-style-type: none"> 1 bdrm 10+ years 2 bdrm 5-10 years 3 bdrm 2-5 years 4 bdrm 5-10 years <p>The submission is summarised by recommendations including the following:</p> <ul style="list-style-type: none"> » Simplify Council development approval process for affordable housing Development Applications and provide additional advisory services to assist 'first-time' compliance, » Promote the positive social and commercial impacts of affordable housing within the community to reduce NIMBYism (Not in my back yard), » Council adopt a fee structure for community housing developments to ensure affordable housing developments are financially viable. This should include: <ul style="list-style-type: none"> > A reduced upfront fee regime exclusively for construction and ongoing management costs of what should be considered community infrastructure (S94 and related Contributions) including Retirement Living proposals that are for affordable retirement living. > Development approval provisions for the inclusion of any appropriate restriction on land title for Council to seek cost recovery of S94 and related contributions should the land revert from affordable or community housing to the general market, > Significantly reduced ongoing rates, fees and other charges which are an impediment to viable affordable housing developments; » Council enter construction and or management partnerships with registered community providers by enabling providers to build on Council owned land under a tenant-in-common type arrangement. The land would remain in Council ownership. This may include conversion of existing Council owned buildings; » Through the planning mechanism, support development bonuses which deliver increased affordable housing outcomes, » Establish a monitoring system to track the increase/decrease in affordable housing over the life of the strategy. <p>Comment/Response: Noted. There is scope for Council to prepare an affordable housing policy as part of a suite of policy documents to support the delivery of more suitable housing.</p>

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No.	Submitter/Precinct	Issues Raised
10	David Penalver/Goulburn Heritage Group	<p>General Heritage Conservation Area: a) Stresses the need for a clear final strategy that prevents damage to existing highly vulnerable inner urban environment close to CBD.</p> <p>GOULBURN's HERITAGE CONSERVATION AREA: Encourages shop top housing restoration – bring life to CBD while catering for younger ppl, singles and those without cars. Agrees with 3 storey apartment living in B3 zone but not facing heritage streetscape. B4; GHG members deplore the current spread of detached villa housing (appearance, impact and no investment value). Supports appropriate medium density residential opportunities. Wants DCP controls in B4 and proposed R3 with site coverage ratios are established to encourage attached 2 storey town housing with garden/courtyard for space. Establish attractive garden spaces within B4 area important to city streetscape, with new townhouses blend sympathetically into their surrounds. Implement Housing policy, with open space DCP guidelines asap.</p> <p>OBJECTIVE Disagree with suggestion Council might allow housing proposals to be considered where no urban design guidelines have been set. This is an abdication of Council's responsibility to provide fair and reasonable guidelines necessary for a developer to know before any project is started. GHG's experience is that it is impossible to raise design standards when project is already on the drawing board. Where guidelines have not been set- or design standards set – Community values continue to be lost at the expense of allowing a developer's wish for financial gain to be met.</p> <p>OUTER FRINGE AREA: Extension of outer fringe w/o Major transport link through the existing settlements will create problems in future. Important that the expansion of the urban fringe does NOT include satellite service precincts that would negatively impact on the economic viability of the CBD. Much of the popn. growth is from tree changer's escaping stress of crowded suburban lifestyle: ppl looking for charm with space for hobbies, a diverse range of housing types needed for 'well off' retirees and those needing smaller, affordable compact units where access will be essential. Provision for larger lots has not been addressed.</p> <p>Supports not straddling Hume Highway and notes inefficient land use at Duck's Lane but note land south of Goulburn suitable for R5 zoning. Land to the south is near CBD and has been provided easy access via Lansdowne Bridge and Braidwood Rd (and is closer than Mary's Mount or Run'O'Waters to CBD.</p>

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No.	Submitter/Precinct	Issues Raised
		<p>Wish the Strategy success.</p> <p>b) General - Goulburn Heritage Group support ALL strategies and policies currently on display for Goulburn. Many overlap but hope for a coordinated successful result linking each one. CBD Beautification – supports all four particularly cutting off Market Street and replacing with a pedestrian walkway. Traffic also an issue that GMC must seriously face (whether underground or multi-storey) – <i>needs an inspiring vision for this very important heritage city in 20 years' time.</i></p> <p>Response/Comment: Council is reconsidering extent of existing conservation area to the north of the CBD, to provide more opportunity for less intact streetscape.</p> <p>Agree with providing more rigorous controls for better outcomes including urban design guidelines but these should be in DCP.</p> <p>Transport links and more efficient use of infrastructure will be considered in the planning for urban release areas and future zoning.</p>
11	Mhairi Fraser/ The Goulburn Group	<p>General: TGG advocates for sustainable development that prioritises biodiversity, social amenity + liveability, heritage values and adaptation of the built environment to climate change.</p> <p>Mary's Mount</p> <p>a) URBAN DESIGN STANDARDS:</p> <p>Council must adopt urban design guidelines as a priority. Including reducing the reliance of new dwellings on 'active' heating and cooling. Location is an example of poor urban design with houses built right to the perimeter making it difficult to plant trees and shrubs for shade and wind protection. Privacy is an issue for many due to close proximity. Colorbond fencing is ugly and absorbs heat in hot weather.</p> <p>Many roofs are dark colours (heat absorbing), without adequate insulation temperature inside these homes are huge. This type of development requires revision from both aesthetic and climate change point of view. Building materials and design should take into account energy efficiency and solar passive design principles (including aspect, building materials, eaves and landscaping), as a minimum insulation and solar hot water. The price point of new dwelling should include the cost of heating and cooling after purchase. This would encourage a shift in building practices towards sustainable homes and liveable communities. It's crucial that Council adopts urban design standards that include the above solar passive design principles along with precinct linkages and amenity.</p> <p>b) LIVEABILITY AND LINKAGES:</p>

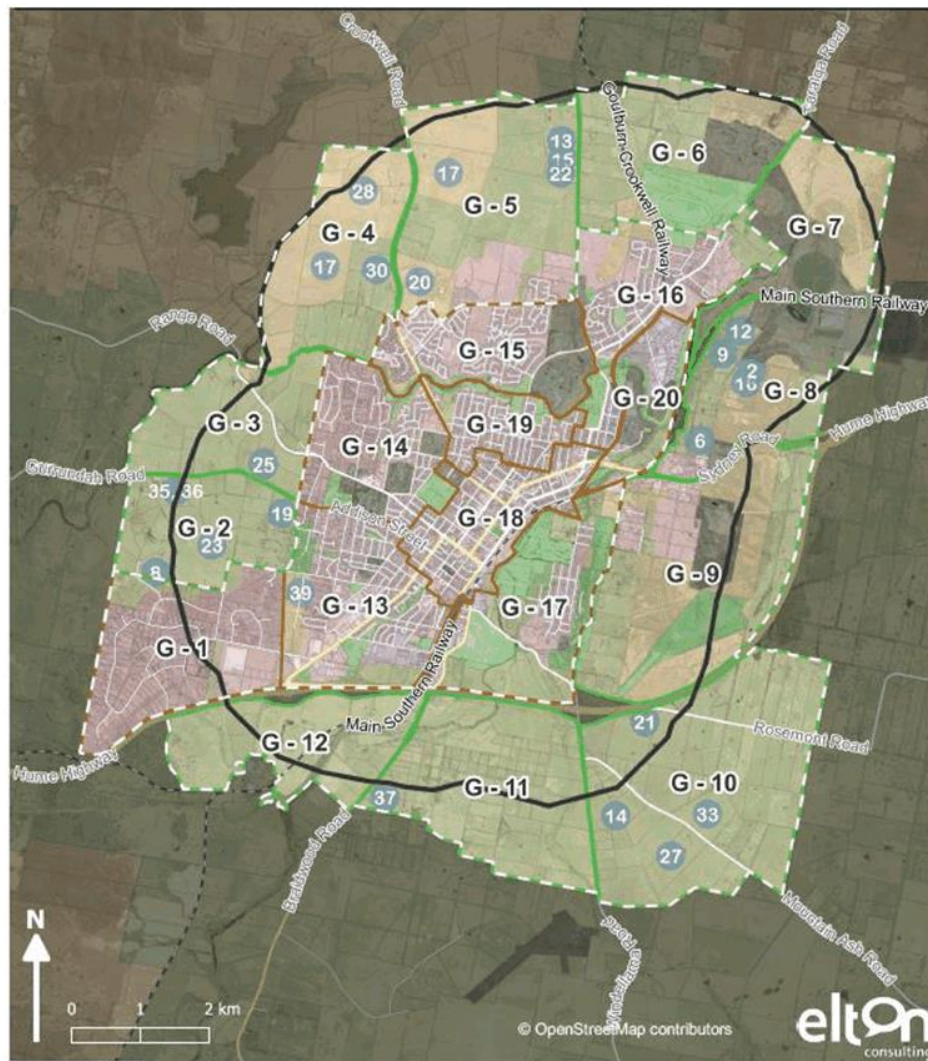
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No.	Submitter/Precinct	Issues Raised
		<p>Strongly applaud the reference to cycle paths, green spaces and footpaths and attention to biodiversity corridors across the urban.</p> <p>Central Goulburn</p> <p>a) GENERAL: In principle support for a mix of housing as in-fill development in the CBD, however some examples to date have not been sympathetic to the Heritage nature of Central Goulburn (eg Clinton St and Marion College) and resulted in bad outcomes from a visual amenity perspective (no sympathy between heritage context and unit complex). The height now blocks the view of cathedral from Clinton St. Verner St and Cowper St developments are sympathetic and demonstrate (roof lines and design compatibility) they can be done properly.</p> <p>b) HEIGHT OF BUILDINGS: TGG feel very strongly that height levels should not be increased in Goulburn. Skyline and vistas are beautiful and Post Office, Cathedrals and Uniting Church (and chimney pots) can be seen from many vantage points are what makes Goulburn attractive. Council at times appears ambivalent and sees heritage as an obstacle rather than an asset that attracts visitors. Retrofitting heritage buildings is a challenge but one that can be resolved by following other leads (Bendigo, Ballarat Bathurst etc). Retrofitting could see new industries develop in the region.</p> <p>c) LOSS OF URBAN HABITAT: Infilling in Central Goulburn should not create another Mary's Mount where houses are built to boundaries and loss of space for trees and landscaping. Central Goulburn has lots of green space and urban backyards, mature street trees all of which contributes to our biodiversity, shade in summer and wind protection in winter and spring (microclimates).</p> <p>Response/Comment: The issues raised in the submission are noted. While the Housing Strategy addresses the land requirements, the review of the more recent development has highlighted the need for a more structured and planned approach to the development of urban release areas to deliver better planning outcomes.</p> <p>No development should be allowed to occur without a detailed concept plan that includes servicing, road hierarchy, open space networks and connectivity back into the town centre.</p>
38	James Fuentes	<p>This is a general submission asking the following questions.</p> <p><i>When will this (the Housing Strategy?) be endorsed?</i></p>

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No.	Submitter/Precinct	Issues Raised
		<p><i>And will the public see the final urban and fringe strategy before it's submitted to state government for endorsement?</i></p> <p><i>Is there any significant changes in terms of Large Lot Residential inclusions in the Goulburn fringe (R5)?</i></p> <p>Response/Comment: the Strategy will likely be endorsed later in 2019. The amendments following the exhibition have been in response to comments made. Council will determine how these will be communicated and whether additional feedback will be sort.</p>

Figure 1 Submissions – Goulburn



Legend

Precincts

Urban
Fringe

Submission

G - 1 Run 'O' Waters (existing)	G - 9 Mt Gray East	G - 17 Eastgrove
G - 2 Run 'O' Waters (rural north)	G - 10 Mountain Ash	G - 18 Central Goulburn
G - 3 Baw Baw	G - 11 Brisbane Grove	G - 19 Ifield
G - 4 Sooley	G - 12 Abattoir	G - 20 Correctional Centre
G - 5 Middle Arm West	G - 13 Garfield	
G - 6 Middle Arm East	G - 14 West Victoria Park	
G - 7 Kenmore	G - 15 Mary's Mount	
G - 8 Gorman Rd	G - 16 Bradfordville	

Figure 2 Submissions – Marulan



Legend

- | | |
|------------|---------------------------|
| Precincts | |
| Urban | M - 1 Marulan Town Centre |
| Fringe | M - 2 Marulan South |
| | M - 3 Marulan North |
| | M - 4 Marulan West |
| Submission | |

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Summary of Agency Submissions

Additional engagement with government agencies was undertaken during the first exhibition of the Draft Strategy and, together with public feedback outlined above, has informed this revised Draft Strategy. Agency submissions are summarised in **Table 3** below.

Table 3 Pre- and during Exhibition Agency Consultation

Agency	Issues Raised
APA HP Gas Pipeline	<p>The proposed Urban Expansion Area was over their asset. The assets have a (max) 675metre (ML – Measurement Length exclusion zone) clearance requirement.</p> <p>This easement does not preclude development but requires strict controls. Sensitive land uses are not supported within the ML.</p>
Department of Primary Industry (6 June 2018)	<p>They suggest referring to the publication <i>Living and Working in Rural Areas</i> handbook and <i>Right to Farm, Maintaining Land for Agriculture</i> and <i>Sustainable Agriculture</i> policies which consider land use conflict, agricultural land use protection and sustainability of agriculture.</p> <p>Generally supported urban housing types such as Town houses, apartments and small style housing options and these will provide more affordable housing options to meet part of the demographic demand.</p>
Department of Primary Industry (2 November 2018)	<p>NSW DPI supports town houses, apartment and small style housing options and consolidating smaller size housing options into the existing town blocks. This type of housing will take up less land and enable greater amount of land for to be used for food production.</p> <p>The neighbourhood planning principles (p27) could benefit from the inclusion of a statement about the use of buffer areas or separation distances between the rural and urban boundary to reduce land use conflicts.</p> <p>The urban expansion principles 9 p32 refer to prime agricultural lands. The inclusion of important agricultural land mapping in that paragraph would enable the NSW DPI work to be recognised in those principles.</p> <p>while the release of lots in unsewered areas provides large lot residential development, it also results in larger area of land being consumed for residential purposes.</p> <p>The area proposed for urban and rural residential release are noted. The following is submitted:</p> <ul style="list-style-type: none"> » Areas adjacent to existing urban or rural residential development is accepted appropriate area for housing development. » There are a number of areas that appear to be isolated lots not immediately adjacent to urban areas that are proposed for release. It is unclear why they are included in the residential release. They are: <ul style="list-style-type: none"> > The area around Boxers Creek Rd > 3 northern lots along Chinamans Lane > 3 isolated lots to the south west along Range Rd,
Water NSW (5 November 2018)	<p>WaterNSW provided the SLWCA maps and reiterate their observations with regard to the identified areas in Figure 1 and 2 of the HS:</p> <p>For the proposed Mary's Mount Water NSW identified:</p> <ul style="list-style-type: none"> » High to Extreme for Residential Unsewered 2,000-4,000 sqm lots,

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Agency	Issues Raised
	<ul style="list-style-type: none"> » mostly extreme for Residential Unsewered 4,000 to 2 Ha lots particularly in northern release area, » Mostly Low to moderate for Residential Sewered development <p>Water NSW state that the Ministerial Direction 5.2 SDWC is still only given limited attention in the Draft Strategy (p19,29) and recommend that the subsection on 'Sydney Drinking Water Catchment' on p29 be prefixed by the term 'Ministerial Direction 5.2' so that council, developers and consultants can readily identify the Direction and its provisions. This Section would benefit by including the general principle that water quality within the SDWC must be protected, and by including the following key principles of the Direction:</p> <ul style="list-style-type: none"> » New development within the Sydney drinking water catchment must have a neutral or beneficial effect on water quality » Future land uses in the Sydney drinking water catchment should be matched to land and capability <p>The above would then provide a clear legal pathway for consideration of the Strategic Land and Water Capability Assessments.</p> <p>Other Issues</p> <p>Figure 1 and 2 would benefit by clearer differentiation of the proposed urban expansion areas and zoning intent without text truncating important boundaries (e.g. Environmental Constraints text truncating the boundaries of the Low Density Residential Zone in Mary's Mount).</p> <p>The Urban Investigation area along with deferred sites 2, 12 (in part), 28 and 21 drain towards Lake Sooley (Sooley Dam). Other issues with stormwater management may also likely arise in any development on these lands. Whilst this water reservoir is not managed by Water NSW, Council may wish to consider the suitability of these sites for urban development, particularly if it is to be unsewered, given their proximity to the reservoir and the possible effects on Goulburn's water supply.</p> <p>The Draft Strategy makes reference to the Seniors Housing SEPP on p24 and p119. The Housing Seniors SEPP does not apply to the Sydney drinking water catchment. This should be clearly stated in the final strategy.</p> <p>Seniors housing is regulated by the provisions of Council's LEP 2009 and is only permissible where it is allowed by the zoning.</p> <p>WaterNSW is supportive of the inclusion of Direction 1: Secure water resources (SETRP Direction 18 – p128) which aims to protect the Sydney drinking water catchment. We particularly note the recognition of Neutral or Beneficial Effect test (NorBE), the need for up to date water cycle management strategies, and the application of Water Sensitive Urban Design principles. Minor corrections are however required. In the 'Implementation Outcome', reference to SWC needs to be replaced with 'Sydney Drinking Water Catchment' and the responsibility placed on Council and Water NSW (not SWC).</p> <p>Further alignment of the proposed release areas with the results of the SLWCA's will help reduce water quality risks arising from new development, and associated costs borne by developers at latter stages in the planning and development process.</p>
Water NSW (1 March 2019)	For Goulburn

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Agency	Issues Raised
	<ul style="list-style-type: none"> » Low to Extreme for Residential Unsewered 2,000-4,000 sqm, with extreme and high risks consistent with drainage lines, » Mostly Low to Moderate but some High and Extreme for Residential Unsewered 4,000 sqm to 2Ha » Mostly low and moderate for Residential Sewered lots. <p>For Marulan</p> <ul style="list-style-type: none"> » Residential Unsewered development 4,000 sqm to 2 Ha – predominantly high to extreme risk except in the south east where the risk is low » Residential Unsewered development 2,000 – 4,000 sqm – predominantly high to extreme risk except in the south east where the risk is moderate » Residential Sewered development – generally Low to moderate risk <p>For Goulburn they particularly note that Site 39 is highly constrained in terms of water quality risk. Much of the land is identified as high to extreme risk as based on the SLWCA's for unsewered 2,000-4,000sqm + 4,000 to 2Ha allotments. This indicates that this site is best suited to reticulated sewer if it is to be developed.</p> <p>For Marulan, including deferred Site 30, areas in the north of the urban expansion area have high and extreme risks for water quality for unsewered development, particularly Lot Sizes 2,000-4,000sqm. The proposed opportunities for R5 Large Lot Residential and RU6 Transition as suggested on Figure 2...may not be suitable if the allotments are to be unsewered. Water NSW recommends that any residential development in these areas should be preceded by reticulated sewerage. This further supports the need to upgrade Marulan STP.</p> <p>SEPP's Directions and Codes</p> <p>They note and support the inclusion of the brief summary of the SDWC SEPP 2011 on p23. However, the last paragraph should be amended as the SEPP only applies to land occurring in the SDWC and therefore does not technically apply to any or all land as currently stated. Water NSW also state that this section on the SEPP would also benefit by stating three key provisions i.e giving effect to:</p> <ul style="list-style-type: none"> » Water NSW's current recommended practices and standards, » Requirement for all development within the SDWC to have a Neutral or Beneficial Effect on Water Quality (NorBE), and » Referring development applications (and Planning Proposals) to Water NSW for concurrence where so required.
Office of Environment and Heritage (Ecology) 29 March 2019	<p><i>In addition to submission received, Council met with OEH staff on 27 March 2019 and an OEH Flood Engineer visited sites at Goulburn and Marulan on 9 April 2019.</i></p> <p>Biodiversity Certification is a strategic assessment process available under the Biodiversity Certification Act 2016. This would help ensure that future developments do not experience some of the land use conflicts that Council and proponents have experienced in some recent residential subdivisions.</p> <p>Prior to any rezoning resulting from the strategy OEH would encourage Council to commence preparing a Goulburn Local Overland Floodplain Risk Management Study and Plan to strategically manage both existing and future flood risk such as those associated with the proposed urban release area and opportunity sites.</p>

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Agency	Issues Raised
	<p>No flood study has been undertaken for the Marulan area. Jaorimin Creek is noted to pass through the proposed urban release area as well as at least one of the Marulan opportunity sites and will have associated flood constraints. These should be investigated through preparation of a flood study prior to areas being rezoned for residential purposes.</p> <p>OEH considers that not only new residential opportunities should be identified by the strategy. The high conservation value land identified in (sic) strategy background reports should be zoned for environmental zones where not currently zoned for more balanced strategy outcome.</p> <p>OEH note the key action of the SETRP to protect validated high environmental value lands in LEP's 14.2.</p> <p>There are some patches of EEC (Box Gum woodland) identified in Urban Expansion Areas. These are identified in HEV layer for SETRP.</p> <p>Of particular note, Biodiversity Certification (BC) (under the BC Act 2016) offers a streamlined process for areas marked for development at the strategic planning stage. This process identifies areas of high biodiversity value at the landscape scale so as to avoid and protect while also identifying areas suitable for development (from a biodiversity perspective).</p> <p>After BC is conferred on an area of land, development may proceed without further triggering the Biodiversity Offset Scheme (under BC Act 2016). This gives councils and proponents greater certainty that biodiversity issues have been addressed ahead of subdivisions.</p> <p>recommending a comprehensive Aboriginal Cultural Heritage Assessment. These studies are consistent with Direction 23 of the SETRP 2036 and would provide greater certainty for stakeholders in any development assessment process.</p> <p>OEH note the 2012 studies and 2009 DCP identifying areas containing Aboriginal significance. OEH suggest that if any areas are present, an appropriate zoning should be put in place to allow for impacts to be avoided. They note Site 19 (Ducks Lane) and Site 7 (Rocky Hill area) have known ACH sites.</p> <p>Floodplain Risk Management</p> <p>Comments in this part reiterate the above and particularly emphasising Section 9.1 Direction 4.3 Flood Prone Land.</p> <p>General Flooding Summary</p> <p>OEH specifically note the following issues specifically identified in the Urban and Fringe Housing Strategy report:</p> <ul style="list-style-type: none"> » Flooding constraints do not appear to have been adequately identified in the Draft Urban and Fringe Housing Strategy 2018 (the strategy) » Of the 8 planning precincts identified in the strategy, all but one are affected by riverine flooding (as per council's Wollondilly and Mulwaree rivers Flood Study (2105)). Major overland flows were not assessed in the flood study, which are yet to be assessed for each of the precincts. » However flooding is only mentioned for the "Eastgrove" precinct, in which the strategy notes that this area lies above the floodplain of the Mulwaree River. This is contrary to council's flood study (2015), which

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Agency	Issues Raised
	<p>shows around 50% of the Eastgrove area within the floodplain with a history of flood affectation.</p> <ul style="list-style-type: none"> » The strategy shows "Goulburn Flooding" extents in Figure 23, which are inconsistent with those presented in Council's Flood Study (2015). » Various opportunities and constraints are discussed in Table 24 of the strategy, including for climate change and flooding. However the implications of climate change on flooding are not mentioned. The report notes significant flooding constraints on the Wollondilly River, however significant flooding constraints associated with the Mulwaree River are not discussed. » Appendix F provides a map of flooding constraints and sites for rezoning in Goulburn. The constraints presented are inconsistent with those illustrated in Council's Flood Study (2015). » The full extent of flood prone land and the potential impacts of climate change have not been considered or assessed.
Rural Fire Service 10 December 2019	<p>The Rural Fire Service referral requested detailed studies addressing evacuation routes and Asset Protection Zones.</p> <p>Note from Council: The parameters of a detailed study suggested matters that would be addressed at a rezoning or development application stage. The key area at the Housing Strategy level is that housing is not located in isolated settlements separated from the existing urban area. This is a criteria that is being considered within the Housing Strategy.</p>
Department of Planning and Environment (email 7 November 2018 and submission 22 February 2019)	<ul style="list-style-type: none"> » Separate the previously identified sites from the HS » Direction 2.1 Environmental Zones (which applies to environmentally sensitive land regardless of the zoning) and Direction 5.10 implementation of Regional Plans are also relevant Section 9.1 Directions that should be added to Section 2.3 Ministerial Directions. » It suggested (sic) to also refer to the government's official population forecast for Goulburn and Marulan (refer to https://www.planning.nsw.gov.au/Research-and-Demography/Demography/Populationprojections?acc_section=2016_nsw_population_projections_data It is noted that the official government pop forecasts of 34,000 people by 2036 is less than the population forecast provided by ID the Population Experts. This is due to different methodologies used. It is considered that both forecasts methods of valid and provide useful information for planning purposes. » The section on infill housing in Marulan (Section 3.3.1 Current and planned housing) could also refer to the recommendation in the endorsed Goulburn Mulwaree Employment Land Strategy to rezone Thoroughfare and Austin Streets B1 Neighbourhood Centre to R1 General Residential (and also Long St – adjacent to Sydney Rd - in East Goulburn). The actions of the EL Strategy concerning the need to address traffic issues in Marulan could also be referred to. » The first sentence in Section 5.1.7 Goulburn Existing Urban Area (p104) is unclear/needs clarification.
Council Heritage Advisor (Louise Thom)	<p>The proposed R3 in the HCA is in an area of dominated by highly intact Federation, Victorian and Inter-War buildings. This location has very little tolerance for change.</p>

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Agency	Issues Raised
	<p>Medium density development would find it difficult to achieve the objective 'To conserve and enhance heritage significance...' in the proposed R3 zoning.</p> <ul style="list-style-type: none"> » The west and south parts of the HCA would pose potential land use conflicts and the controls contained in S3.3.5.7 are not compatible with medium density development. » In the proposed R3 area, medium density development would only be possible with the amalgamation of and retention of the historic houses at the front. This would need to strictly follow the objectives and controls of the DCP. » Lot amalgamation and boundary adjustments to Heritage items within the HCA should be prohibited. Heritage items should be significant enough to retain all their features including subdivision pattern. » The proposed R3 medium density zoning is likely to be contrary to the objectives and controls of the DCP which is to conserve the heritage significance of the HCA. The level of change required to achieve medium density would erode the principle characteristics of the HCA.
Council	<p>On 19 March 2019 Council resolved to:</p> <ul style="list-style-type: none"> » Support the rezoning of land at Mary's Mount (Mistful Park) from B1 Neighbourhood to R3 Medium Density with a Minimum Lot Size of 1,500 sqm, and » Rezone in Marulan from B2 Local Centre to R1 General residential with a LSZ of 700 sqm, and » The GM DCP in relation to commercial and <i>medium density housing</i> is to be amended.
OEH (Heritage)	<p>Heritage have made a submission strongly recommending that Council undertake a Heritage Study - 7 Nov 2018.</p> <p><i>Council does have a Heritage Study which was finalised in January 2018 which reviewed earlier heritage studies undertaken for both Goulburn and Mulwaree Councils. A copy is on Council's web site.</i></p>
Essential Energy	Identifies location of electrical infrastructure
DPE Housing Strategy Guidelines	Document has been updated in line with guidelines.

1.5 Clarification

The objective of the Strategy is to identify land suitable to meet the housing needs of Goulburn and Marulan to 2036. Fundamental to this Strategy is the need to identify land which is potentially suitable for **urban residential use** in both the short to long term, to ensure the preservation of this area for the future orderly growth of the towns to occur. Council provided a "study area" which included the existing urban areas of Goulburn and Marulan and also identified the extent of the urban fringe. The Strategy focus was generally contained to this area, however, where, due to contiguous ownership, or where properties straddled the "fringe", the Study area was expanded to include these areas.

In addition to this, council sought a high level review of a number of sites that had been identified by individuals seeking re-zoning of land. These were referred to as Opportunity Sites.

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This was a secondary aspect to the Strategy, as the sites have been nominated by owners over time and were not identified as a part of a strategic growth strategy for either urban expansion or for rural residential development. The number of various public requests for rezoning in part necessitated the need for the broader housing strategy to occur to ensure that development occurred in an orderly and economic pattern that considered the broader constraints and opportunities available on the fringe of both Goulburn and Marulan.

The process of identifying the most suitable land for residential expansion and the assessment of Opportunity Sites were two different processes. The Key Sites were not a starting point. The criteria for determining residential expansion were:

- » Consideration of environmental constraints
- » Contiguity with existing urban areas and ability to sequence development
- » Access to reticulated water and sewer
- » Scale in terms of the ability to deliver a significant residential area rather than isolated pockets of development

The ability of the existing planning controls to absorb development; in the form of higher densities e.g. Dual occupancy and multi-dwelling housing or re-subdivision e.g. subdividing all residential land to achieve the current minimum lot sizes was also considered. In the context of a regional community, given the availability of land, desire for space and current planning framework, greenfield development is likely to be the preferred and more feasible option for developers. Therefore, while consideration of the opportunities to accommodate more people in the existing urban area are an important part of the Strategy, the key focus is new development areas.

Rural Residential Development

Rural residential development, regardless of the zone, is land developed primarily for residential purposes and not connected to reticulated water and sewer.

This form of development was initially considered in the background research undertaken as part of the investigation of development areas. However, the Strategy focus was on serviced land as a priority because:

- » There is a need to provide for up to an additional 2,750 residential dwellings in the urban fringe of Goulburn (assumed that 250 could be accommodated as infill in the existing urban area)
- » The land in the urban fringe area is highly fragmented, particularly in the west and this impacts the economic and orderly development of land. Further, fragmentation would limit the potential long term expansion of Goulburn and may lead to a reduction in growth in the city as developers look elsewhere
- » There is the opportunity for further rural residential development under the current planning controls
- » Environmental constraints limited the development potential of large areas of land within the urban fringe
- » It is a form of development that is inefficient in terms of the land requirements and does not make a significant contribution to land supply
- » Goulburn and Marulan both have aging populations and an increasing number of lone person households. Current housing stock is predominately 3 bedroom detached dwellings and at odds with anticipated demand

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Given the overwhelming interest in this form of development through the first exhibition process, it was decided that further investigation into rural residential development needed to be considered.

1.6 Key Issues First Exhibition

The majority of submissions received by the community were from individual land holders seeking inclusion in the Strategy to allow subdivision for rural residential development. In support of this position the key issues raised are summarised in the following table. The table also includes a comment by way of response.

Table 4 Key Issues

Issue	Response
Accuracy of Biodiversity and other constraints mapping	<p>This issue was raised by a number of submissions, including some who had prepared site specific biodiversity assessment.</p> <p>Post Exhibition, EcoLogical Australia undertook a further assessment of the known biodiversity constraints based on data available from the Office of Environment and Heritage. Following a desktop assessment of the High Environmental Value (HEV) land mapping, an ecologist from EcoLogical Australia and OEH undertook observations of areas in the urban fringe that may be otherwise suitable for urban development and to determine where subsequent degradation of native vegetation has occurred since the publication of existing data sets.</p> <p>The updated Biodiversity Report and mapping has been used in the revised Strategy.</p>
Failure to provide Rural Residential Development Opportunities	<p>The land around both Goulburn and Marulan is highly constrained by both natural environmental constraints, including flooding and biodiversity as well as built form or land use constraints, for example the gas pipeline to the north of Goulburn, abattoir or mineral resources exclusion areas as in Marulan.</p> <p>In addition it was initially understood that there was capacity in the current planning controls to accommodate some growth in rural residential development.</p> <p>Subsequently, more of the previous analysis has been incorporated into the Strategy document</p>
More detail in the consideration of the Urban Fringe	<p>Many of the submitters expressed a view that the consideration to preferred options was too narrow.</p> <p>Others who were outside the Opportunity Areas were also seeking inclusion</p> <p>In response, a precinct based approach has been taken. This allows for more accurate understanding of site specific constraints and opportunities</p>
Range of Lot Sizes	<p>There were a range of lot sizes proposed as being suitable for rural residential development.</p> <p>Council needs to ensure that there is sufficient land available for serviced residential development to accommodate growth both to 2036 and beyond. Both Marulan and Goulburn are very</p>

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Issue	Response
	<p>constrained. Failure to protect the urban fringe from fragmentation will inhibit the long term growth of Goulburn.</p> <p>It is extremely difficult to re-subdivide a rural residential area (for example Ducks Lane/Run'O'Waters), once it has been developed. The current LEP identifies the RU6 Transition zone to protect land from fragmentation.</p> <p>The RU6 Transition zone, therefore, is the starting point for consideration of land for urban purposes and subdivision of these areas below 10ha should be discouraged unless a Development Control Plan is in place that will guide the orderly and economic delivery of services and infrastructure.</p> <p>Allowing 1-2 ha and up to 5ha rural residential lots throughout the urban fringe will not address the future housing needs.</p> <p>Goulburn will need to accommodate an additional (up to) 3,500 dwellings to 2036. If these are to be in the form of 1-2ha Council would need to provide up to 7,000 ha for this purpose.</p>
Need for Clarification of Criteria	<p>There are criteria for the identification of greenfield sites, however, submissions had a focus on rural residential development.</p> <p>Additional criteria have been developed to inform the decision making process in terms of considering the Opportunity Sites. In particular, reference to the RU6 Transition zone and establishing that the proposal will not prevent key sites from future development. The Strategy notes that these criteria could be used to assess future applications for rezoning.</p> <p>This is not designed as a full assessment tool. Each site will need to be considered in merit and Council cannot refuse to accept a Planning Proposal to rezone land. Rather, it should provide a checklist for both Council and a landowner.</p> <p>Consistency with the Strategy and the Regional Plan will always be the overriding factors.</p>

1.7 Second Exhibition of Draft Strategy

Revision following Public Exhibition

As noted above, one of the outcomes of this first exhibition of the Strategy was a significant re-working of the document to address the key issues raised. The scale of changes led to a decision to re-exhibit the Strategy to provide transparency.

Following consideration of a report on the revised Strategy, Council on 15 October 2019, resolved to re-exhibit the document and invite submissions from interested persons. The exhibition period was between 18 October and 18 December 2019. Drop-in sessions were hosted by GMC as follows:

- » Marulan – 2pm – 6pm, 19 November, 2019 at the Marulan Community Hall, 70 George Street, Marulan
- » Goulburn – 2pm – 6pm 25 November, 2019, Council Chambers, 184 Bourke Street, Goulburn

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During the public exhibition period 28 submissions were received, 4 from Agencies, and 24 from members of the public. These submissions are summarised in Table 5 and Table 6 below. Many of the submissions follow on from submissions made earlier in the consultation process, including the exhibition of the earlier Draft Strategy. A number of new public submissions relate to issues and opportunities raised in the revised Draft Strategy.

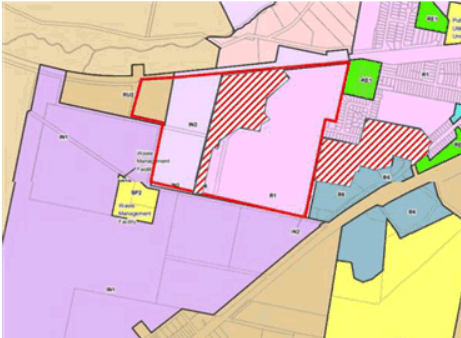
Summary of Public Submissions

Numbers start with a 2 to indicate the second exhibition of the Draft Strategy.

Table 5 Overview of Public submissions during Second Exhibition

No.	Submitter/Precinct	Issues Raised
2.1	Laterals Planning – Goulburn and District Race Club 12 Dec 2019 Precinct 6 Middle Arm East No submissions made in the first DUFHS exhibition on this matter.	<p>Seeks to have a section of the Goulburn and District Race Club site, 204 Taralga Rd, Goulburn (Lot 1 DP 12155740) included within the Strategy as an area suitable for rezoning from RE2 Private Recreation to R5 Large Lot Residential. Also seeks the inclusion of a portion of land affected to be included in Schedule 1 of the LEP to allow animal boarding and training establishments.</p>  <p>The proposal has potential to allow for approximately 15 residential lots ranging from 2000 -3000m2 in area.</p> <p>A number of studies were undertaken in support of the submission. Preliminary consultation has also been undertaken between the Race Club and APA in relation to the Gas Pipeline. APA made a number of suggestions to the proponent which are consistent with APA's advice to Council in relation to identifying and protecting the easement, measurement lengths for sensitive uses etc.</p> <p>The submission states that connection to town water/sewer services is possible and proposed.</p> <p>The submission assesses the suitability of the site against the criteria in the Strategy for consistency, and against the objectives of the R5 zone.</p> <p>Response/Comment: The site was not identified as an opportunity site, however, is located opposite the opportunity site for Precinct 7 – Kenmore, across</p>

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No.	Submitter/Precinct	Issues Raised
		<p>Taralga Road. The submission is consistent with the Strategy in that essentially this would be an infill development of a site that can be serviced. However, the submission is seeking large lots on land that could potentially be serviced which is contrary to Section 1.6 of the Strategy.</p> <p>Larger lots would need to be justified either on the basis that the site constraints would limit smaller lots or that this is essentially facilitating a mixed land use within this area (i.e. a special precinct around the racecourse) being animal boarding and training establishment with residential component.</p> <p>A note has been added to the Precinct 6 overview that this may be an opportunity site and may include animal boarding and training establishments, with a subsequent Planning Proposal being the appropriate mechanism to determine the specifics for this site.</p>
2.2	<p>Willow Tree Planning on behalf of Darraby Pty Ltd and Marulan Estates Pty Ltd</p> <p>18 Dec2019</p> <p>Precincts Marulan Town Centre and Marulan West</p> <p>Partly refers to former Site 15 (for comments on Portland Ave etc) as identified in the first exhibition of the DUFH.</p>	<p>Supports the principles and directions of the Draft Strategy and seeks to have additional land considered for residential development in Marulan as identified in the plan below in red and white hatching.</p>  <p>Specifically land zoned RU6 within the Marulan Estate area and land zoned IN1 and IN2 located within Portland Drive and Wilson Drive.</p> <p>That a priority should be made of using the RU6 land within Marulan Estate which is closer to the centre of town in preference to the land identified to the East of the Hume Highway.</p> <p>Land currently zoned IN1/IN2 in Portland and Wilson should be considered for residential as it would be more consistent with the land uses closer to the town centre and reduce the impact on residents and local roads in relation to industrial traffic.</p> <p>The RU6 area within Marulan Estate has not been considered a housing opportunity in the Strategy due to perceived constraints.</p> <p>The RU6 zone was previously identified to address stormwater detention requirements associated with the development of the residentially zoned portion of</p>

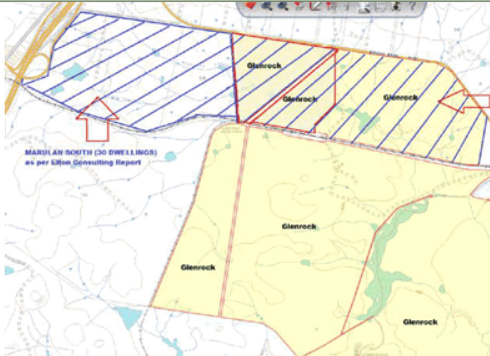
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No.	Submitter/Precinct	Issues Raised
		<p>the site which is no longer required by Council. It does not serve the purpose identified in the zone objective to provide a transition to rural land as it is located between industrial and residential.</p> <p>Further to the above, as a secondary objective to this submission, the draft UFHS should consider the existing IN1 and IN2 industrial zoned land immediately to the east (along Wilson Drive and Portland Avenue) of the Site for potential rezoning for residential purposes. Such an outcome may provide opportunities to:</p> <p>Improve access and amenity through residential and commercial areas.</p> <p>Redirect haulage routes and heavy traffic from this area providing an opportunity to improve the quality of local roads. This is in response to one of the constraints identified for the precinct within the draft UFHS.</p> <p>Improve the land use interface with the Town Centre and its surrounds.</p> <p>Provide further housing opportunities in an appropriate location in response to the targets of the draft UFHS.</p> <p>The submission acknowledges that the site constraints identified within the draft UFHS must be overcome. The Site and its immediate surrounds are currently restricted by access, bushfire, haulage routes, and the mineral resources buffer which may impact any increase in density via subdivision.</p> <p>Response/Comment</p> <p>With regard to the land identified around Portland Ave for rezoning to residential this is generally supported but would potentially trigger a review of the current <i>Employment Lands Strategy</i>. The DUFHS not the appropriate strategy for considering review of industrial/commercial land supply.</p> <p>With regard to the RU6 zoned area, it is not identified as a housing opportunity in the Strategy due to existing constraints.</p>
2.3	<p>Urbanism on behalf of Ganter Constructions</p> <p>15 Dec 2019</p> <p>Precinct 15 - Mary's Mount</p> <p>Refer previous Submission 4 - "Site 26" First Draft UFHS exhibition.</p>	<p>Raises concerns with the rapid visualisation approach for identifying HEV lands (vegetation) when applied to the Mistful Park site.</p> <p>A Flora and Fauna Report was submitted for the site with the lodgement of the Planning Proposal for this site (prior to its inclusion with the Housing Strategy). This report was far more detailed and prepared in consultation with Council.</p> <p>The rapid visual assessment has resulted in a greater area being represented as potential HEV than that previously identified in the more detailed study.</p> <p>a) The draft Strategy acknowledges Council's Resolution of 6 March 2018 in relation to the Mistful</p>

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No.	Submitter/Precinct	Issues Raised
		<p>Park Urban Expansion Lands Planning Proposal (Precinct 26 formerly and now Precinct 5) which states:</p> <p>2. <i>The Planning Proposal to rezone the 'Mistful Park' property is supported in principle but deferred at this time pending the outcome of the Urban & Fringe Housing Strategy.</i></p> <p>3. <i>The Planning Proposal to rezone the 'Mistful Park' property be included on a list of properties to be considered in the Urban & Fringe Housing Strategy and the applicant be encourage to investigate the concerns raised by the State Government Departments</i></p> <p>b) The draft Strategy is corrected to acknowledge the more rigorous environmental field work that has already been undertaken by Woodlands Environmental Management in direct consultation with Council's environmental and Strategic Planning staff in 2017. Further, that environmental overlays contained in the draft Strategy are corrected to identify the site as being subject to detail site surveys already undertaken by the landowner in consultation with Council staff.</p> <p>c) That the draft Strategy specifically identifies Mistful Park Urban Expansion Lands Planning Proposal as substantially progressed and proponent-led and that a report recommending its progression to the NSW Department of Planning Industry and Environment LEP Gateway be received for Council's consideration along with the draft Strategy so that the detailed environmental assessments and pathways can be progressed with OEH.</p> <p>Response/Comment:</p> <p>Noted. There is an opportunity for proponent led planning proposals and this has been acknowledged in the revised draft Strategy.</p> <p>This site will require an BDAR as part of that process to verify at a site level the biodiversity impact of development. Site specific recommendations and history have not been included in the Strategy as this level of detail is not considered to be appropriate for this document.</p>
2.4	<p>Tomasy Planning On behalf of Gormen Pty Ltd 7 Dec 2019 Refer also Submission 29 – DUFHS – First Exhibition.</p>	<p>Seeks to include a portion of "Glenrock" (248 Highland Way, Marulan) as potential rural residential development within the Draft Strategy as per below.</p> <p>The submission suggests that if the inclusion of the land identified in Highland Way for rural residential is essential then the inclusion of this segment is essential as well as it has the same constraints and topographical features.</p>

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No.	Submitter/Precinct	Issues Raised
		 <p>This is supported by justification in relation to location and site suitability (refer submission for details). I notes that inclusion of this property within the strategy is:</p> <ul style="list-style-type: none"> Consistent with the Strategy Does not undermine future residential land opportunities There is an absence of land use conflict Not flood affected. Connects to existing road network Provides a meaningful number of lots Practical utility: cost and efficiency Community benefit must be placed over developer opportunism. Exclusion from Strategy will adversely impact Glenrock <p>Response/Comment:</p> <p>Development of this precinct has been questioned by Water NSW, DPIE (Geoscience) and Boral due to water quality constraints and to potential residential/quarrying interface constraints. As a result no further development is recommended under the Draft Strategy.</p>
2.5	<p>Tod Anderson on behalf of T & T Equity Pty Ltd 5 Dec 2019 Refer Submission 7 – DUFHS – First Exhibition</p>	<p>Submission in relation to 152 – 194 Brayton Road Marulan.</p> <p>Supports the inclusion of this property as a development opportunity site in the context of a possible future residential zoning. Submission indicates willingness to participate in or independently initiate a planning proposal for this site.</p> <p>Seeks to clarify the language used in the call-out to the Precinct Map and relationship between flood constraints and lot size.</p> <p>Comment/Response:</p> <p>The areas indicated in the Strategy are indicative only, with more detailed zone boundaries to be determined at the Planning Proposal stage.</p>

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No.	Submitter/Precinct	Issues Raised
2.6	<p>Suresh Guduguntla on behalf of Kentgrove South Property Pty Ltd 17 Dec 2019</p> <p>This is outside the investigation area and was identified as Site 38 in the original DUFHS exhibition.</p>	<p>To clarify, the precinct map has been amended to designate it for urban residential.</p> <p>Seeks to have land known as 17699 Hume Highway, Towrang identified as a future land release opportunity site in the Strategy for rural residential lots with minimum lot size of 5HA around Riparian Corridors and 2HA in other areas.</p> <p>Justification includes, but is not limited to, the following.</p> <ul style="list-style-type: none"> » the subject site is well located - it has access from both the Hume Hwy (1.3km frontage) and Boxers Creek Road (1.5km frontage), and is in close proximity to the northern entry to / exit from Goulburn » the subject site is right across the road from 420 Acres Industrial zoned land which will eventually be developed into Industrial hub / park. » Electricity and telecommunication connections are readily available for extension into the subject site. An electricity easement traverses the subject site. » the subject site is large enough to accommodate the environmental issues e.g. riparian corridors, biodiversity etc. There is no flood affectation outside riparian corridors on the subject site. <p>This submission suggests that the reasons previously used to exclude this property from the Strategy are not substantiated as follows:</p> <p>Not Contiguous to Goulburn urban area:</p> <p>Even though the subject site is not contiguous to Goulburn town, it is right across the road from 420 Acres of industrial zoned land which will be developed into industrial hub / park and the subject site would be ideal for people to live and work across the road. Also, any infrastructure investment to develop the industrial zoned land would be more cost effective to have development on either side of highway rather than just on one side.</p> <p>Economic indicators suggest that there will be growing demand for affordable rural residential lots from people living in Sydney who are considering tree change to Goulburn region, as Goulburn is only 90mins away from Campbelltown / Camden areas and the lot sizes are getting smaller and expensive in Sydney and its fringes. Also, having mix of rural residential lots around the fringes of Goulburn along Hume Highway corridor with direct access to highway will cut down 10 to 15min travel time.</p> <p>One of the key strategies of the Goulburn Mulwaree Community Strategic Plan 2030 is "to provide</p>

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No.	Submitter/Precinct	Issues Raised
		<p>opportunity for residential and rural residential development and encourage affordable housing".</p> <p>The subject site is within a 3km radius of the Precinct G-10 Mountain Ash identified for growth area in Urban and Fringe Housing strategy for 164 large lot dwellings.</p> <p>Biodiversity:</p> <p>The site is identified as "Biodiversity" on the Terrestrial Biodiversity Map Goulburn Mulwaree LEP 2009. It is understood that the Office of Environment and Heritage and Council are revising the map.</p> <p>The "Biodiversity" identification potentially reflects the presence of some remnant vegetation on parts of the site.</p> <p>We understand from the local Ecological consultant that in the Goulburn Mulwaree LGA, particularly in the periphery of Goulburn, the Terrestrial Biodiversity Map only broadly reflects the actual biodiversity values at any particularly location in the LGA. Indeed, the Terrestrial Biodiversity Map is often inaccurate when considered at the site scale and therefore it should be revised following field-surveys to appropriately ground-truth and map the biodiversity values of the subject land.</p> <p>We have been advised by the Local Land Services back in August 2018 that, "there is no sensitive land on this property - only vulnerable is the riparian protected area - see Map 2. The land is a very cleared landscape and would be close to <10% vegetation cover - which would restrict most clearing activities besides the allowable activities".</p> <p>The subject site has very little conservation value given that it is highly modified grassy woodland and its prolonged grazing history.</p> <p>Flooding</p> <p>There is no flood affectation outside riparian corridors on the subject site.</p> <p>Comment/Response:</p> <p>The inclusion of this site as a rural residential opportunity area is consistent with the Strategy only in so far that connection to water/sewer is unlikely.</p> <p>Significant upgrades to Hume Highway access would be required.</p> <p>Suitable supply for rural residential is already identified in the Strategy primarily in the Mt Gray East, Mountain Ash and Brisbane Grove precincts. These precincts are closer to the Goulburn centre and have better road access (i.e. do not require Hume Highway access upgrades).</p> <p>The flood mapping for Goulburn does not extend to this area, therefore, flooding would need to be further</p>

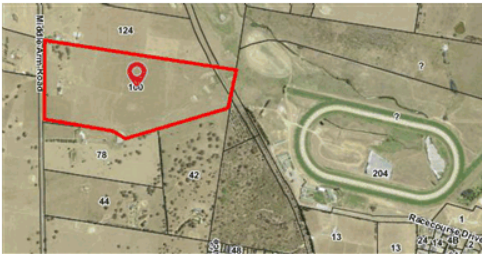
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No.	Submitter/Precinct	Issues Raised
		assessed. The biodiversity value of the site is also not assessed in detail, however this is not a primary factor for excluding this site from the Strategy.
2.7	JH & EM Hoskins 18 Dec 2019 Gorman Road Precinct Refer also previous Submission 2 – DUFHS First Exhibition.	<p>Supports the consideration of land in the Gorman Road precinct for lot sizes of 2ha minimum.</p> <p>Seeks that Council rezone the sewer irrigation area land to a compatible land use as the use of this area will affect future residential land use of other properties on Gorman Road.</p> <p>Suggests that Council expand the Gorman Road Cemetery to include all or part of:</p> <p>Lot 491 DP669162</p> <p>Lot 1 DP 111406</p> <p>Lot 50 DP 750050.</p> <p>Comment/Response:</p> <p>The future of the sewer irrigation area once identified as surplus to Council's requirements is a separate matter for assessment.</p> <p>The expansion of the Gorman Road Cemetery is a separate matter for Council to investigate, outside of this Strategy which is focused on housing.</p>
2.8	Stewart Thompson 16 Dec 2019 Precinct 2 Run 'O' Waters Rural North Refer previous Submission 23 – Site 4 – First DUFHS exhibition.	<p>The submission relates to the proposal to rezone land to a 700m2 minimum allotment size.</p> <p>A number of precinct specific observations are made in support of the identification of the future residential area given the ability to provide:</p> <ul style="list-style-type: none"> » Water/sewer service provision. » Telephone and internet service provision » Electricity provision <p>The submission observes that the release of this area will provide an opportunity for better road connection with Goulburn (connectivity with Existing Run-O-Waters and capacity for a further emergency egress from this locality.</p> <p>Water quality requirements can be met with a future residential development.</p> <p>The precinct does have some environmental constraints with areas containing the Tableland Grassy Box- Gum Woodland endangered ecological community and riparian corridors. These areas provide opportunities as green/habitat corridors. Biodiversity stewardship should be considered with future development to protect and maintain these areas.</p> <p>Development along the northern section of Run o Waters should be limited to provide a buffer and wildlife corridor. Some owners in this section have expressed a desire to maintain a rural outlook.</p> <p>Comment\response:</p>

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No.	Submitter/Precinct	Issues Raised
		<p>This submission is generally supporting the inclusion of this site as an opportunity area in Precinct 2 – Run'O'Waters (north).</p> <p>Further biodiversity investigation will need to be undertaken for the north/south corridor between Bonnett Drive through to Addison St/Gurrundah Road to enable a more specific approach to the consideration of this area's redevelopment. This is likely to occur as a part of a Planning Proposal process.</p>
2.9	<p>Southern Cross Consulting Surveyors On behalf of the Parlett and Murray Families</p> <p>15 Jan 2020</p> <p>407 and 457 Crookwell Road, Goulburn (Lots 70 and 73 DP 1006688).</p> <p>Precinct 4 Sooley</p> <p>Refer also previous Submission 30 – First Exhibition of DUFHS "Site 6".</p>	<p>The submission notes that the Urban and Fringe Housing Strategy - Post Exhibition Review prepared by Elton Consulting and dated 2 October 2019 response to the previous submission dated 21 February 2019 was supportive of part 407 Crookwell Road being suitable for future urban expansion for 'short to medium term release' but for mapping which identified that the site as being mapped as biophysically strategic agricultural land (BSAL). Subsequent investigations and inquiry indicate however that the application of BSAL mapping is relevant only to the gateway process for mining and petroleum development under <i>SEPP (Mining, Petroleum and Extractive Industries) 2007</i>. In this respect, the application of BSAL mapping relating to a proposed change in zoning from rural to urban is not appropriate.</p> <p>The subject site is not isolated and adjoins land on the eastern side of Crookwell Road which has been identified for short term urban release. It is anticipated that the site is capable of a lot yield in excess of 200 lots containing areas of not less than 700m². In area, the development site mirrors recent subdivision precincts in Goulburn, known locally as Mistful Park, Teneriffe, Belmore Estates, Monastery Gardens, The Tillage and Joseph's Gate. These developments have been highly successful and have met local market demands.</p> <p>Comment/response:</p> <p>Part of 407 has been identified as an opportunity area. Council during the exhibition of the Strategy contacted NSW DPIE to gain clarification as to the nature of the impact/constraint that the BSAL classification poses in relation to the Strategy. As stated in the submission, DPIE confirmed that BSAL is a tool used in the SEPP - mining, petroleum and extractive industries.</p> <p>However, the BSAL constraint aligns with Class 3 land and soil capability being land capable of a wide variety of land uses. It remains a valid constraint to development particularly in the short term and in circumstances where sufficient land has been identified that does not share this constraint. The adjoining opportunity area in the Middle Arm West precinct is identified for short/medium term development guided by a Structure Plan\DCP to ensure</p>

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No.	Submitter/Precinct	Issues Raised
		<p>adequate open space\green infrastructure, and social infrastructure, and assist in calculating water and sewerage servicing requirements.</p> <p>It is, however, recommended that the priority status of "low" be removed to facilitate a proponent lead planning proposal.</p> <p>The submission includes 457 which was not identified as an opportunity area at this stage. Again, this site is almost completely within the class 3 ag land area. It is not intended to include this site given the area of land identified elsewhere.</p> <p>At this stage, the Strategy has identified sufficient land to satisfy residential demand and it is recommended that this site remain rural.</p>
2.10	<p>Garrie Roberts 14 Nov 2019 North of Goulburn fringe study area. No previous submission to DUFHS on this matter.</p>	<p>Requests that the land previously proposed under Amendment 6 including 130 Marble Hill Road, Kingsdale to be considered under the Strategy.</p> <p>Requests investigation of council's Heritage Map which includes 130 Marble Hill Road.</p> <p>Comment\Response: 130 Marble Hill Road, Kingsdale is located well outside of the fringe investigation area for the Strategy. Heritage Map revisions are outside the scope of the Strategy which is focused on housing.</p>
2.11	<p>Bernadette & Hugh Moran 26 Nov 2019 100 Middle Arm Rd, Goulburn (Lot A Plan 357487) Precinct 6 Middle Arm East Site sits immediately above previous "Site 1" in original DUFHS. No previous submission to DUFHS on this matter.</p>	<p>This submission seeks inclusion of 100 Middle Arm Rd has in the potential Residential zones. More correctly, it appears only the South-Eastern corner of our property is included in the proposed Residential zones, causing our property to have dual zoning.</p>  <p>We would submit that the entire 28.33 Hectares should be zoned Residential, for serviced low density Housing.</p> <p>The reasons for this include:</p> <ul style="list-style-type: none"> » the property is contiguous with urban areas, with close proximity to town » part of our property is already in the land bank designated as Serviced Residential » because of its location there is viable serviceability re water and sewer

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No.	Submitter/Precinct	Issues Raised
		<ul style="list-style-type: none"> » the size of the property (28.33 HA / approx 70 acres) provides the ability to stage development, particularly if the owners of adjacent smaller properties remain on their holdings long term as lifestyle properties. » the property is a flat, treeless plain, which will require minimal clearing of vegetation. » the property has road frontage to Middle Arm Rd. <p>Comment/response</p> <p>100 Middle Arm Road is located north of the APA gas pipeline which closely follows the southern boundary and crosses the south-east corner of the property.</p> <p>100 Middle Arm Road is within the identified 'future residential urban release area'. This development opportunity area is proposed for serviced residential (700sqm MLS) post 2036 or once land south of the gas pipeline has been developed/residential supply in identified precincts is exhausted.</p>
2.12	<p>George Gildea</p> <p>29 Nov 18 Dec 8 Jan 2020</p> <p>Previous submission in relation to APA Gas pipeline management made to Council and reported on with the previous post exhibition report on the DUFHS</p>	<p>This submission relates specifically to the presence and management of the high pressure gas pipelines owned and managed by APA and APA's representations to Council on this matter in relation to the Strategy and potential development of identified opportunity areas to the north of Goulburn.</p> <p>The submission does not accept the proposition by APA that there is any responsibility upon Council as a planning authority in relation to assessing and planning around risks associated with the high pressure gas pipeline.</p> <p>The submission reiterates that the gas pipeline is the sole responsibility of APA. Furthermore, that nobody outside the pipeline operator is required to protect the assets of the pipeline operator. Furthermore, there is nothing contained within SEPP (Infrastructure) nor within the Australian Standard requiring Council to undertake upon itself any responsibilities associated with pipeline safety.</p> <p>The submission states that the pipeline easement restriction only apply to the land below the surface and not to surface land use.</p> <p>Comment/response:</p> <p>DPIE also made a submission relating to the gas pipeline. Please refer to 1.9 Key Issues further on in this report.</p>
2.13	<p>Precise Planning on behalf of the owner of 515 Crookwell Road, Kingsdale</p> <p>3 Dec 2019 Sooley Precinct</p>	<p>As per a previous submission to the earlier Strategy this site is sought to be included as an area which is appropriate for rural residential development. With lots ranging in size from 4000m² – 2ha.</p> <p>The reasons given in support of rural residential development include:</p>

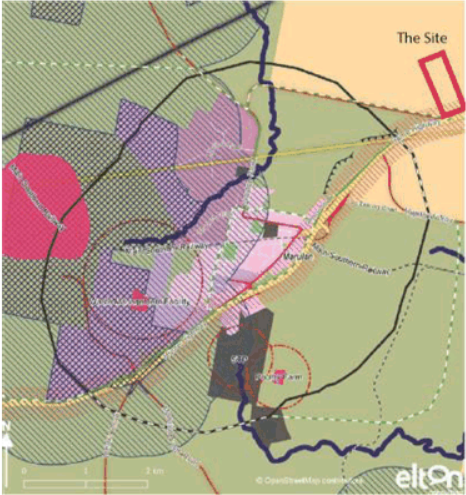
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No.	Submitter/Precinct	Issues Raised
	Refer Submission 28 (DUFHS first round exhibition and "Site 12).	<ul style="list-style-type: none"> » The site is only moderately constrained in relation to other more highly constrained sites. » The site has no productive use and will be sterilised if left out of the Strategy. » Water quality issues and proximity to Sooley Dam can be addressed. » Council has not undertaken any feasibility analysis on which to base decisions on likelihood of extension of water and sewer services to this site which disadvantages the land owner. » Holistic on site effluent management solutions should be addressed now rather than left until later. » Intensive Plant agriculture is a permissible use and would have a similar impact in terms of water quality. » Council should consider this matter in context with other sites and against the orderly and economic objectives of the NSW Environmental Planning and Assessment Act. <p>Comment/response</p> <p>This submission is not supported. Reasons for exclusion include:</p> <ul style="list-style-type: none"> » The demand for urban residential and rural residential land in Goulburn has been met as identified within the Strategy. » The sites chosen for urban development are more contiguous with existing residential than this site. » For rural/large lot residential (where no town water/sewer connection is proposed), the development opportunity areas identified are not within an immediate catchment for Sooley Dam - Goulburn's water supply.
2.14	<p>Kingsdale Consulting for 16 Nicole Place</p> <p>12 Dec 2019</p> <p>Garfield Precinct</p> <p>Refer also previous Submission 39 – First exhibition of DUFHS</p>	<p>This submission is in relation to a request to reduce the minimum allotment size of the E4 Rural Living Zone on the eastern side of Carr Street from 8000m2 to 4000m2.</p> <p>The description of the Garfield Precinct in the Draft Strategy does not really fit with the Cathcart Street locality.</p> <p>A previous submission to this Strategy included an assessment of biodiversity for this area which found the remnant native flora is limited with many established gardens with exotic species. Therefore, a reduction of the minimum allotment size on the eastern side of Carr Street will not have a significant impact on biodiversity.</p> <p>Comment/response:</p>

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No.	Submitter/Precinct	Issues Raised
		<p>The precinct character description has been updated to include the transitional large lot residential area on the western fringe.</p> <p>Council could consider a reduction of minimum lot sizes within the zone where supported by an assessment of biodiversity value.</p>
2.15	<p>Goulburn Heritage Group 14 Dec 2019 Precinct 18 – Heritage Conservation Area/CBD Refer also previous Submission 10 – First exhibition DUFHS.</p>	<p>Generally supports the revised Strategy and offers specific comments on Precinct 18 – heritage Conservation Area, where medium density residential expansion needs to be encouraged.</p> <p>Comments/response: Council's developer contributions plans will require updating as a part of the planning associated with substantial zoning change.</p> <p>Design guide details are more appropriately included in a development control plan (DCP). Council is in the process of reviewing its DCP. Desirable streetscapes and design standards can be incorporated into the DCP, however, Council is not resourced to provide individual site controls for every site.</p> <p>For the purposes of the Strategy it is relevant to consider Heritage as a constraint when identifying areas suitable to be rezoned to R3 – Medium Density. It is agreed that heritage can be an opportunity for urban design purposes.</p> <p>A greater number of units in the CBD is consistent with the need identified in the Strategy to increase housing choice in serviced areas and housing to suit an ageing population.</p> <p>An action to review planning provisions in the LEP/DCP in the CBD to allow more housing has been added and Precinct 18 has been updated to include CBD opportunities for housing.</p>
2.16	<p>John Craig & Jeanette Shuttle 16 Dec 2019 Lots 11 and 12 DP 1156095 (Middle Arm Road and Progress Street) Bradfordville Precinct No previous submission to DUFHS – however had sent letter to Council seeking a PP in relation to Point 1.</p>	<p>This submission relates to two matters:</p> <ol style="list-style-type: none"> 1. Request to rezone the portions of the identified lots currently zoned E3 Environmental Management to R2 Low Density Residential. A plan submitted which (was originally supported by a detailed slope stability investigation) indicates extent of slope affectation. E3 Areas where slope affectation remain problematic should have the minimum lot sized reduced to 4ha on the presumption a lot this size could have a suitably located dwelling site in relation to the slope. 2. Notes that Lot 8 DP 258489 Progress Street (former Site 14) has an approved subdivision on it which should be acknowledged by the Strategy. <p>Comment/response:</p> <ol style="list-style-type: none"> 1. The boundaries of identified development opportunity areas are indicative only. Lots 11 and 12 are within an area generally identified for urban


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No.	Submitter/Precinct	Issues Raised
		<p>development and would have a relatively minor impact on the overall supply of housing. If the constraints are addressed, and the land can be serviced, Council could consider a PP, <i>however</i>, noting that DPIE (Environment)'s submission to the Strategy states 'any split zones should be rezoned in favour of Environmental zones'.</p> <p>2. Lot 8 is already zoned R2 with an expectation of residential development and therefore requires no further consideration by the Strategy.</p>
2.17	<p>Little Develop Co on behalf of Mr and Mrs Kelly</p> <p>17 Dec 2019</p> <p>15108 Hume Highway, Marulan Lot 12 DP 700290</p> <p>Just north of Marulan North precinct.</p> <p>No previous submission has been made in relation to this site.</p>	<p>This submission seeks the inclusion of 15108 Hume Highway, Marulan Lot 12 DP 700290 as outlined in red (below) when overlaid on the Constraints Map for Marulan.</p> <p>Seeks an LEP amendment to reduce the minimum allotment size from 40ha to 10ha and suggests that this can add to housing supply. The amendment would facilitate a 4 lot subdivision.</p>  <p>Suggests there is strong strategic merit in this as there are minimal to no physical constraints:</p> <ul style="list-style-type: none"> » The site is in a single ownership and has connection to electricity. » The site is bushfire prone (which can be managed). » The site is not flood prone. » The site has two access points. » New dwellings could be sited outside of 250m from the Hume Highway. » The site is within 3km of the Marulan town centre. <p>Comment/response:</p>

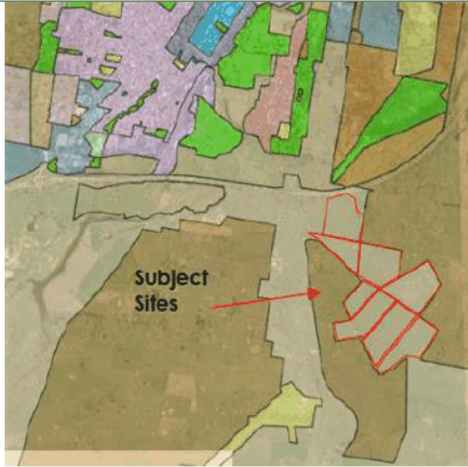
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No.	Submitter/Precinct	Issues Raised
		This submission not supported, as this site is located outside the investigation area and does not offer a substantial contribution to rural residential supply.
2.18	<p>Jessica Renshall on behalf of the owners of 1 Bishopthorpe Lane, Baw Baw</p> <p>17 Dec 2019</p> <p>Baw Baw Precinct</p> <p>68 Range Road and 1 Bishopthorpe Lane Baw Baw.</p> <p>No previous submission made to DUFHS.</p>	<p>The sites are within the RU6 Transition Zone and identified in the Baw Baw Precinct of the Strategy. This area is intended to be held in reserve for urban residential (for development post 2036).</p> <p>A portion of this area was a non-putrescible land fill site for building waste. The filling process has ceased, and the capping process is underway. The site has been tested for gas leakage and has had shown zero emission. Tested on June 2019 by Consulting Earth Scientists.</p> <p>The site currently abuts a rural residential zone, therefore requests that the zone be extended to include these properties.</p> <p>If not rezoned the land will sit unused and create a less than desirable landscape as the site has little to no agricultural value for land use.</p> <p>Proposes a subdivision into 14 Large Lot Residential sites at 4,000sqm each, with semi-private open space in the middle. The any residential buildings will not sit on the areas where filling has taken place.</p> <p>The site is accessed by two roads, Range Road and Bishopthorpe Lane and is already connected to water, electricity and sewage.</p> <p>Seeking development in keeping with the local trend and will service the future of the area by providing further housing with the added benefit of semi-private open space in the middle. An equestrian arena has been mentioned as a possibility and such a use is permissible on the site of the former landfill.</p> <p>Comment/response:</p> <p>The DUFHS identifies this area as having potential for future urban serviced lots as it is considered more constrained by slope than other opportunity precincts identified. It should be protected from fragmentation by large lot residential development in the meantime (until 2036 or such a time that housing supply identified in the Strategy is exhausted).</p> <p>Note: This site includes a licenced fill site on 68 Range Rd (as described above) and a rural residential property on approximately 10 ha. The site also borders historic</p>

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No.	Submitter/Precinct	Issues Raised
		<p>site 'Bishophthorpe'.</p> 
2.19	<p>John Taylor 18 Dec 2019</p> <p>Refer previous submission 14 – First exhibition of DUFHS – vicinity of “Site 25”.</p>	<p>Congratulates Council on the revised Strategy and appreciates the consideration of the community input for the previous exhibition.</p> <p>Refers to Site 25 (reference to original Draft Strategy) in the Mountain Ash Precinct 10, and notes the update to the biodiversity comments which now reflect lesser constraints for this issue and supports this.</p> <p>States that there is no impact in this area from noise associated with motor racing.</p> <p>Questions the Precinct 10/11 Constraints and Opportunities Map and regarding the boundary of the area noted as 140.6 ha, but notes that this may only be indicative.</p> <p>Notes an error in Precinct 19 Ifield.- A potential infill area is vacant blocks behind Goodstart Early Learning, access via Erith St. This area is actually in Precinct 18 Central Goulburn.</p> <p>Remains unclear about how demand is established.</p> <p>Comment/response</p> <p>Boundaries of opportunity areas within the Strategy are only indicative. Further detailed assessment of a number of constraints will be required to determine extents of areas available which are suitable for large lot residential development.</p> <p>Ifield precinct map has been revised to generally encourage infill rather than identifying specific sites.</p> <p>Refer to ‘Large lot residential demand and supply’ section 1.8 Clarification of this report.</p>
2.20	<p>Mecone on behalf of Windellama Road Pty Ltd 18 Dec 2019</p> <p>Refer previous Submission No 27 for “Site 25”</p>	<p>Submission on behalf of owners at Mountain Ash Road, Brisbane Grove as indicated in red below.</p>

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No.	Submitter/Precinct	Issues Raised
		<div>  </div> <p> Submission suggests that demand may be greater for rural residential lots than that specified in the Strategy. The submission is concerned that the Strategy is ambiguous in terms of whether a Council led Planning Proposal will be prepared for large lot/rural residential investigation areas. Requests that Council does undertake a Council led PP and that this be clarified. The submission included a concept subdivision plan and constraints mapping. </p> <p>Comment/response:</p> <p> Next steps have been updated and clarified in the Implementation section of the Draft Strategy. </p> <p> Given the extent of development opportunity areas considered in the precinct approach of the revised draft strategy it is not practical to undertake a single Council-led PP. Council's preference is for individual planning proposals representing groups of owners within precincts. </p> <p> Site studies and works to complete PPs are to be at the cost of the landowners as: </p> <ul style="list-style-type: none"> » This strategy will see a huge uplift in value for land identified as development opportunity. » Sites are likely to be sold and developed by others. » Council cannot afford the studies. » Some studies will take longer than others depending on the site. » The willingness/ability of owners to financially contribute will vary. <p> Concept subdivision plans are not considered as a part of this Strategy as the Strategy is considering broader constraints across all precincts. Details of individual sites and potential subdivision layouts will be </p>

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No.	Submitter/Precinct	Issues Raised
		considered as a part of further planning proposals, site specific technical studies etc.
2.21	APA Group 18 Dec 2019 Goulburn Precincts 4 Sooley, 5/6 Middle Arm, 7 Kenmore. 4-Marulan West. Previous submission included in State Agency Submissions (following first DUFHS exhibition). Privately owned infrastructure provider.	<p>This submission relates specifically to APA's interest as the owner and manager of the high pressure gas pipelines which pass through the LGA and in particular North Goulburn.</p> <p>Overall, APA is generally supportive of the Strategy. However, it but suggests further inclusion of commentary and mapping of APA's existing HPTGPs and easement within the study area, specifically:</p> <p>Figure 1 Urban Expansion Recommendations Goulburn Overlay APA's existing HPTGPs and easement.</p> <p>Figure 2 Urban Expansion Recommendations Marulan Overlay APA's existing HPTGPs and easement.</p> <p>Section 4.8.1 Criteria of identification of greenfield sites APA recommends inclusion of the following statement: <i>Development should minimise conflict and not result in fragmentation of existing high pressure transmission gas pipelines.</i></p> <p>Section 4.9 Constraints and Opportunities Assessment APA recommends inclusion of commentary regarding high pressure transmission gas pipelines within Table 24 – Opportunities and Challenges as follows: (refer to full copy of submission).</p> <p>APA reiterated comments made in the previous submission in relation to:</p> <ul style="list-style-type: none"> » the preferred treatment of its easement as a linear open space reserve and in relation to road crossings over its easement (i.e limited to periodic perpendicular crossings). <p>Safety Management Study (SMS) The development envisaged under the Strategy would change the land use classification around the pipelines and therefore trigger the need for a Safety Management Study (SMS). In essence, the pipeline has been designed for a rural environment where the risk of damage to the pipeline is low and the consequence of a full bore rupture is also relatively low. The proposed change in land use significantly increases the risks. Therefore, these risks must be examined and measures put in place to reduce the risks to acceptable levels.</p> <p>The current stage of planning is an ideal time to complete an SMS. This is because development layouts can be changed and sensitive land uses can be identified.</p> <p>APA prefers that an independent facilitator manage the SMS to avoid a perceived conflict of interest. APA's</p>

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No.	Submitter/Precinct	Issues Raised
		<p>position is that the cost of the SMS and any necessary risk management measures (e.g. slabbing the pipeline) be the responsibility of the 'agent of change'.</p> <p>Completing an SMS at this stage ensures the SMS addresses the site as a whole and allows costs to be shared between various development proponents.</p> <p>Australian Standards 2885 and the Measurement Length (ML – 675m either side of pipeline) and safety issues including the exclusion of sensitive uses from the ML.</p> <p>In a separate letter to Council dated 18 December, 2019 APA has advised:</p> <ul style="list-style-type: none"> » It is a principle of the SMS that it merely identifies addition controls that may be required. It does not seek to apportion costs associated with such controls. » There are SMSs conducted for a range of purposes including: » Prior to construction to establish the required controls and design parameters » periodic operational review (5 yearly) » Encroachment SMS for activity within the pipeline corridor/easement <p>Land use change SMS triggered by specific development proposals. In this instance, the SMS required is triggered only by land use change as a result of the Draft Urban and Fringe Housing Strategy, and is focused on examining risks associated with that land use change. It is not triggered by any change in the pipelines or the age of the pipeline.</p> <p>Planning Generally</p> <p>APA also summarised in its letter dated 18 December, 2019 that:</p> <p>The ML is not an area over which APA has any legal control or any form of tenure, nor do we wish to exercise any such rights. The ML is not an area in which development or activity is precluded. The ML does not prevent use for standard agricultural activities. It does not prevent urban or rural residential development occurring. In fact, there are many instances around Australia, including through major metropolitan areas where development, including residential housing, exists up to the edge of the pipeline easement, with no issue to APA or to the surrounding residential development. In addition, the easement itself provides the opportunity for valuable linear open space, which is an asset to the surrounding community.</p> <p>APA does not seek to impose any outcome on Council (or private development) outside of our pipeline easement, but we are obligated to ensure that Council</p>

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No.	Submitter/Precinct	Issues Raised
		<p>and developers are aware of the pipeline, associated issues, and work to achieve the best outcomes.</p> <p>Comment/response:</p> <p>APA comments on the preferred treatment of pipeline easements as linear reserve noted and including on the relevant constraint's maps. The preferred development areas maps exclude the constraints, therefore, including the pipeline is not considered necessary.</p> <p>See Key Issues section (1.9 of this report) as well as submissions from DPIE and George Gildea on this issue.</p>
2.22	<p>Gunlake 13 Jan 2020</p> <p>Refer previous Submission 24 – First Exhibition of DUFHS.</p>	<p>This submission is mainly concerned with:</p> <ol style="list-style-type: none"> 1. The identification of constraints associated with Gunlakes' operation, e.g. the use of the haulage route along Ambrose Road from Brayton Road to Red Hills Road. 2. Residential interface issues associated with the use of this road, number of truck movements etc. This route was built to partly avoid residential interface issues with the previous haulage route through Marulan. This would be negated by providing more residential access to Ambrose Road. <p>Comment/response:</p> <p>The Marulan North constraints map includes a buffer to the Gunlake haulage route similar to the Hume Highway buffer. This has been added to the map legend. Precinct overview and development opportunities identified have been updated to stipulate that access will be from the south with limited to no access north to Ambrose Road - Hume Highway so as to not impact on the haulage route.</p> <p>Site specific DCP provisions when drafted for the North Marulan Precinct can include further detail on limitation of access of residential subdivisions to haulage route. Master planning will be used to identify preferred access options in this precinct.</p>
2.23	<p>Jan & Alex Weir and David Long 13 Jan 2020 Lot 13/DP573773 and Lot 364/DP750015</p> <p>Precinct 3 – Baw Baw Refer previous Submission 25 also known as "Site 22" first DUFHS exhibition.</p>	<p>Lot 13/DP573773 and Lot 364/DP750015 to be considered under the Strategy as a site for future (short to medium term ie: 2-5 years) environmentally sustainable 'Green Certified', residential development. While it is recognised that proposed allotment sizes would be subject to further land capability and infrastructure capacity analyses, we propose that the minimum lot size for both allotments be amended to 700sqm.</p> <p>Such an amendment is consistent with Council's previous statements on the best use of the subject land as outlined below and is consistent with the recommended future development of the land and</p>

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No.	Submitter/Precinct	Issues Raised
		<p>precinct as cited in the revised Urban and Fringe Housing Strategy.</p> <p>Comment/Response</p> <p>Green certified developments are certainly encouraged to proactively adapt to the challenges of a changing climate.</p> <p>It is noted that these lots are located next to the current zone boundary with the R5 zone on Addison Street (and Council water reservoir). The sites are lower than the reservoir and could be connected to town water services. It may be possible to connect in future to town sewer services (with pumping stations required given the topography).</p> <p>Refer to 1.9 Key Issues below - Prioritisation of opportunity areas.</p>
2.24	<p>Boral</p> <p>16 Dec 2019 and 7 Jan 2020</p> <p>Peppertree Quarry, South Marulan</p> <p>No previous submissions to DUFHS.</p>	<p>Boral objects to the inclusion of land south of the Hume Highway identified as Precinct 2 Marulan South and the recommendation that the land is suitable for residential rezoning and seeks its removal from the Strategy for the following reasons:</p> <ul style="list-style-type: none"> » Lack of demonstrated demand (oversupply of LLR; no demand in Marulan South and sufficient supply elsewhere in the LGA, speculative rezoning likely to have long term implications for agricultural and resource operations); » The potential interface impacts that would likely arise from the locating of an increased number dwellings within proximity to extractive industry, mining operations, and associated rail assets; » Lack of site suitability due to inherent constraints and incompatibility of residential development with surrounding and established primary production uses. <p>Boral is concerned that inclusion of land identified as Precinct 2 Marulan South would lead to land use conflict due to its proximity to primary industry, including large scale extractive industry and mining, and that the justification provided within the report is not evidence led.</p> <p>Comment/response:</p> <p>The South Marulan opportunity area has been deferred.</p> <p>Refer to submissions from Water NSW and DPIE (Geoscience) and section 1.9 Key Issues: South Marulan Large Lot Residential and Effluent Management Areas (EMAs) of this report.</p>

Summary of Agency Submissions

Additional engagement with government agencies and infrastructure providers was undertaken during the exhibition of this revised Draft Strategy. Together with public feedback outlined above, Agency feedback has informed these final revisions to the Draft Strategy. Agency submissions are summarised in Table below.

Table 6 Re-exhibition Agency consultation summary

Agency	Issues Raised
Department of Planning, Infrastructure and Environment 19 December 2019	<p>Considers the revised draft Strategy to be significantly improved and strongly supports the precinct-based approach to new development areas. The provision of a variety of housing types including low and medium density, including infill opportunities, as well as additional large lot residential opportunities is also supported.</p> <p>Comments are minor editing or clarification matters, as noted below.</p> <p>Consistency with South East and Tablelands Regional Plan:</p> <p>A number of the proposed development precincts, e.g. Marulan South, Run-O-Waters (Rural North) appear to contain verified high environmental value (HEV) land. The inclusion of validated HCV land in the estimated dwelling yields may create an unrealistic development expectation. It is suggested that Council consider revising the proposed development footprints to avoid validated HEV land consistent with the stated intent of the draft Strategy and requirement of Directions 14, 15 and 28 of the South East and Tablelands Regional Plan.</p> <p>It's unclear from the Strategy whether HEV data has been validated for all of the proposed development precincts or just for specific properties. Council could consider identifying in the Strategy if additional validation is required for specific precincts to inform the preparation of a planning proposal.</p> <p>Population projections:</p> <p>Updated population projections have recently been released for Goulburn Mulwaree LGA. These are available on the Department's website https://www.planning.nsw.gov.au/projections</p> <p>Council note: The population projections from DPIE recently released focus on the low range projection only. The high range projection whilst in the document only appears in a graph which makes it less prominent. The projections are stated in the document as not having to be applied to Housing Strategies. It is considered that the assessment of population in the DUFHS is relatively conservative and takes into account a higher growth scenario so as to ensure supply. It also provides a clear blue print for future expansion, which will guide planning proposals and infrastructure planning.</p> <p>Eastern Gas Pipeline:</p> <p>It is suggested that Council refer to the Department's Planning Circular in the Strategy in relation to buffer and other mitigation requirements for development proposals on land adjoining the Gas Pipeline. https://www.planning.nsw.gov.au/-/media/Files/DPE/Circulars/planning-circular-18-010-act-and-regulation-changes-2018-10-26.pdf?la=en</p> <p>Council note: The Planning Circular mainly relates to the Development Application stage. Regardless, it is in the public interest to identify all potential hazardous constraints to development and mitigate them at</p>

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Agency	Issues Raised
	<p>the strategic stage. The Circular does refer, however, to other documentation for the assessment of hazardous development being:</p> <p><i>"Such development should consider preparing a risk assessment as part of the development application to demonstrate that the development will comply with the risk criteria for land use safety planning published in Hazardous Industry Planning Advisory Paper No. 4 – Risk Criteria for Land Use Safety Planning. It is important to have a comprehensive understanding of the hazards and risks associated with the operation of the pipeline and of the adequacy of safeguards.</i></p> <p><i>In assessing the tolerability of risk from high pressure pipelines, both qualitative and quantitative aspects need to be considered.</i></p> <p><i>Any quantitative (numeric) risk assessment should be consistent with the principles published in Hazardous Industry Planning Advisory Paper No. 6 – Hazard Analysis. The risk assessment is to be performed by a suitably qualified professional. This assessment is the responsibility of the applicant and must be undertaken in consultation with the pipeline operator. The risk assessment should be submitted with the development application."</i></p> <p>Constraints/opportunity mapping:</p> <ul style="list-style-type: none"> » It's unclear what the green squares around the proposed development area on the Marulan South Opportunity Map represent. Suggest these are included in the key to the map. » Arrows linking text boxes with proposed development areas are missing on the Gorman Road, Mt Gray East, Kenmore, Run-O-Waters (Rural North) opportunity maps. <p>Ministerial Directions:</p> <ul style="list-style-type: none"> » Ministerial Direction 2.1 Environment Protection Zones is also relevant to the Strategy because it applies to all environmentally sensitive areas, not just to environmental zones. » Suggest that reference to Direction 5.1 Implementation of Regional Strategies is removed because the Direction was revoked on 17 October 2019. <p>Other:</p> <ul style="list-style-type: none"> » Suggest removing section 1.2.4 "Sydney Canberra Corridor Regional Strategy" because the Regional Strategy is no longer relevant as it has been replaced by the South East and Tablelands Regional Plan.
<p>Department of Planning, Infrastructure and Environment (Environment)</p> <p>18 December 2019</p>	<p>Aboriginal Cultural Heritage</p> <p>Supports the approach of early consideration of Aboriginal cultural heritage (via comprehensive assessments) in consideration of future development areas. The Dept. provided a separate table with comments on specific precincts in relation to Aboriginal Cultural heritage.</p> <p>Flooding</p> <p>The Department acknowledges that the feedback from the previous submission has been incorporated in the revised Strategy. The Department requests that Council continue to work collaboratively to obtain reliable flood information to inform future planning of the LGA and the plans such as the Strategy.</p>

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Agency	Issues Raised
	<p>Biodiversity</p> <p>The Department recommends that:</p> <ul style="list-style-type: none"> » There is no large lot residential development planned for areas with validated HEV, keeping in mind that areas of HEV must be validated (by an appropriately qualified professional) before a planning proposal is considered. » Areas that are already zoned environmental should not be rezoned to a different zone which offers less protection. » Any split zones should be rezoned in favour of Environmental zones. <p>Council should consider opportunities under the Biodiversity Conservation Act, 2016 for strategic biodiversity certification of future urban release areas.</p>
<p>Department of Planning, Infrastructure and Environment (Geoscience)</p> <p>9 January 2020</p>	<p>The Division has reviewed the Strategy and provides the following comments in relation to Ministerial Planning Direction 1.3 – Mining, Petroleum Production and Extractive Industries, and the Goulburn Mulwaree Mineral Resource Audit 2015.</p> <p>Goulburn housing precincts:</p> <p>The Strategy identifies the Sooley and Middle Arm West precincts are coincident with the Kingsgate Limestone Potential Resource Area (PRA). While the Division is not aware of current extraction operations or plans for development, residential zoning would prohibit development of limestone resources within that part of the Kingsgate PRA. The Division acknowledges the Strategy has avoided the Kingsgate PRA around the Baw Baw and Run 'O' Waters precincts, and that the majority of the PRA remains zoned for rural land uses and available for potential limestone extraction.</p> <p>The Division has no issues with the Goulburn housing precincts.</p> <p>Marulan housing precincts:</p> <p>The Strategy identifies land around Marulan West as being highly constrained by Lynwood Quarry. The Division supports the recommendation that there is no additional development capacity in West Marulan due to significant constraints including incompatible land uses, and that housing in this precinct would sterilise potential resource areas or quarry expansion.</p> <p>The Division acknowledges the potential for land use separation between the Marulan North URA and the Gunlake Quarry haul route as well as a recommendation to limit residential use.</p> <p>The Division has no concerns with the Marulan South area (north of the main Southern Railway), however further residential development within area M-2 south of the Main Southern Railway in the vicinity of the Peppertree Quarry private rail line (Consolidated Mining Lease16) would be of concern to the Division.</p>
<p>Water NSW</p> <p>18 December 2019</p>	<p>General</p> <p>The overall revised Strategy is more responsive to site constraints than the previous version.</p> <p>Where 2ha unsewered lots are proposed Water NSW wants greater consideration of the results of the Strategic Land and Water Capability Assessments (SLWCAs) and the buffer distances required for effluent management areas (EMAs).</p>

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Agency	Issues Raised
	<p>South Marulan appears to be particularly constrained with much of the area being generally unsuited for unsewered residential development. Further consideration of the SLWCAs and EMA buffer distances may help refine Precinct boundaries, improve lot yield estimations, and reduce water quality risks arising from later new development. It will also help ensure that later development will be able to achieve a neutral or beneficial effect (NorBE) on water quality as required under <i>State Environmental Planning Policy (Sydney Drinking Water Catchment) 2011</i>.</p> <p>Precinct boundaries are not overlain with the constraints analysis, it is difficult to determine how the Strategy responds to the site constraints at this broad scale. To this end, Figures A and B would benefit by overlaying the boundaries of the Precincts to show how their location and shape respond to the constraints identified. The constraints analysis would also benefit by including results of the Strategic Land and Water SLWCAs and, for large lot residential development, buffer distances required for EMAs (see below). Such an approach would help substantiate how the Strategy has responded to site constraints including risks to water quality.</p> <p><i>Comment/Response: Figures A and B detailing Goulburn and Marulan constraints were intended to give a general visual appreciation of the main areas of affectation for each town. Layering all constraints would result in unnecessary complexity and reduce the legibility of maps. Constraints are sufficiently mapped by precinct.</i></p> <p>Effluent Management Areas (EMAs)</p> <p>Within the Sydney Drinking Water Catchment, EMAs are required to be sited 100m from permanent or intermittent watercourses and from the full supply level for all water supply reservoirs. They are also required to be located at least 40m from farms dams and drainage features.¹ The Strategy recognises the 100m buffer requirement noting that it poses a constraint to large lot residential (un-serviced lots) development in some fringe precincts, particularly South Marulan, Brisbane Grove and Mountain Ash (p.64). However, none of the individual Precinct summary maps factor this 100m buffer distance into the constraints analysis and only the Marulan South Precinct summary mentions this 100m EMA buffer requirement.</p> <p>WaterNSW recommends that the Precinct Summaries analysis for the Large Lot Residential Precincts (Gorman Road, Mt Grey East, Run'O'Waters, Brisbane Grove, Mountain Ash and South Marulan) be reviewed to include consideration of the EMA buffer distances in the respective Precinct constraints analyses as projected lot yields may be over-estimated. Such a review may also help identify which land is heavily constrained by the presence and density of watercourses and drainage features and therefore where unsewered development may be highly constrained. The revised analysis would also help ensure that water quality is protected and that a NorBE can be achieved in future subdivisions arising in these areas.</p> <p>Strategic Land and Water Capability Assessments (SLWCAs)</p> <p>Outputs from the SLWCAs are provided for Residential Sewered land and Unsewered Residential lots 4,000m² to 2ha for both Goulburn and Marulan (Appendix D). However, these outcomes are not discussed in the body of the Strategy. It is unclear whether and how the SLWCAs</p>

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Agency	Issues Raised
	<p>have informed the broad site constraints analysis (Figures A and B) or those conducted for individual Precincts (Section 3).</p> <p>The Strategy would benefit by more clearly articulating how it responds to water quality risks as informed by the SLWCA results. To this end, the Strategy should examine the location and boundaries of the Opportunity Precincts (Figures C and D) against the water quality risks as informed by the SLWCA results, and provide some explanatory text. Ideally this would be supported by maps that overlay the Precinct polygons for:</p> <p>a) the 'Serviced Urban Residential' and 'Urban Release Area Long Term' for Goulburn (Figure C) and Marulan (Figure D) with the SLWCAs for Residential Sewered land for Goulburn and Marulan ((Figures 4 and Figure 5 of Appendix D, respectively), and</p> <p>b) 'Large Lot Residential' areas for Goulburn (Figure C) and Marulan (Figure D) with the SLWCAs for Unsewered lots 4,000m² to 2ha for Goulburn and Marulan (Figures 6 and 7 of Appendix D, respectively).</p> <p>The Strategy would also benefit by mentioning the results of the SLWCAs in the Individual Precinct boundaries, particularly the outcomes of the SLWCA for Unsewered Residential lots 4,000m² to 2ha in relation to the Precincts identified for Large Lot Residential development.</p> <p><i>Response/Comment:</i></p> <p>» <i>All urban development is to be sewerred so the SLWCAs for unsewered residential lots are not relevant for the urban areas. All rural/large residential lot areas identified in precincts such as Mt Gray East, Mountain Ash, Brisbane Grove and Marulan South were deliberately identified as having lots with a minimum of 2ha. There is no SLAWCA detailed for lots over this size as far as Council is aware. The main areas identified in SLAWCAS for extreme risk are watercourses. This is reflected in the general requirement for a 100m setback from riparian areas for on-site EMAs.</i></p> <p>Sewer and Related Services</p> <p>All Precinct summaries would benefit by clearly stating whether the opportunity areas are, or proposed to be, connected to services such as sewer and water.</p> <p><i>Response/Comment:</i></p> <p>» <i>All urban residential opportunity areas are proposed to be connected to water/sewer and other services (refer Section 3). Large lot (rural residential) residential opportunity areas are generally proposed to be unsewered for a MLS greater than 2ha. In some circumstances there may be an opportunity to provided smaller lots and these will need to be connected to reticulated water and sewerage infrastructure.</i></p> <p>Goulburn</p> <p><i>Large Lot Dwellings</i></p> <p>Large Lot dwellings are proposed in four Precincts (Gorman Road, Mt Grey East, Mountain Ash and Brisbane Grove) in Goulburn with one area, Run'O'Waters, including a limited number of unserviced adjoining Large Lot Residential Serviced residential development.</p> <p>In email correspondence of 4 December 2019, Council confirmed the Gorman Road large lot residential opportunity areas are largely occurring on the western flank of Gorman Road on land that is already</p>

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Agency	Issues Raised
	<p>cleared. WaterNSW is supportive of this approach as it avoids the vegetated areas that the SLWCA (for Unsewered Residential Development lots 4,000m² to 2ha) identifies as a posing a High Risk to water quality. Some areas of Extreme Risk occur along the drainage features, and future lot configurations would need to be sensitive to the constraints presented by these features.</p> <p>WaterNSW is supportive of the Mount Gray East (seemingly incorporating former deferred Site 7) provided the land proposed for development is that land which is already cleared. The cleared land in this area generally has a Low to Extreme Risk to water quality (for Unsewered Residential Development Lots 4,000m² to 2ha), with most Moderate Risk and the Extreme Risk areas being confined to drainage features. WaterNSW is supportive of avoiding the steep areas of vegetated land immediately east of this site which are generally High to Extreme Risk and therefore poorly suited to rural residential development.</p> <p>The Brisbane Grove and Mountain Ash areas are generally associated with a Low to Extreme Risk to water quality as based on the SLWCA for Unsewered Residential Development Lots 4,000m² to 2ha. Areas of Extreme Risk are generally associated with drainage features. There should be sufficient flexibility in this landscape to accommodate large lot dwellings. However, a number of drainage features in this area include 3rd and 4th order streams with large catchments. Buffer distances for EMAs may influence the projected lot yields in this Precinct, particularly for those areas between Mountain Ash Road and Windellama Road. Lot configurations will need to be sensitive to watercourse constraints. The Brisbane Grove area is generally less dissected by drainage features than Mountain Ash and may have greater propensity to meet the lot yields projected.</p> <p>The Run'O'Waters precinct includes an estimated 11 Large Lot dwellings as well as 1,693 residential dwellings. Relevant to the Large Lot dwellings, the SLWCA for Unsewered Residential Development Lots 4,000m² to 2ha reveals that the land generally carries a Low to Moderate water quality risk, with an Extreme risk being associated with waterways. At face value, there appears to be sufficient capacity within this area to sustain 11 Large Lot dwellings as proposed. The position of EMAs with respect to nearby serviced residential development will need to be considered in any Planning Proposal and subdivision application for this area.</p> <p>The Strategy generally adopts a 2ha MLS for Large Lot residential development, although the Tables on page xv identify the possibility of smaller MLS 2,000-4,000m² being supplied to the Large Lot Residential land at Run'O'Waters Precinct only if water and sewer services become available (see page xv). WaterNSW supports this approach.</p> <p>Marulan</p> <p>Marulan is highly constrained in terms of being able to supply unsewered Large Lot Residential development. In previous correspondence, WaterNSW identified concerns with regard to unsewered development risks for urban areas to the north of Marulan, noting that the risk to water quality is predominantly High to Extreme in that area (based on the SLWCA for Unsewered Residential, 4,000m² – 2ha lots; Figure 7 Appendix D). The revised Strategy (page xv) now</p>

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Agency	Issues Raised
	<p>advocates a possible staged approach to deliver the Serviced Urban Residential development to Marulan North.</p> <p>WaterNSW does not support the staged approach, and believes that the proposed Marulan North Precinct should be fully serviced with reticulated sewerage prior to residential development and occupation. For sewer development, the water quality for these general areas (combined) is Low to High with a Moderate Risk predominating except in the south-east of the Precinct which generally has a Low Risk to water quality. WaterNSW is therefore supportive of those aspects of the Strategy that seek to reduce water quality risks by ensuring that new urban development is sewer in these areas.</p> <p>The Strategy also proposes to accommodate Large Lot Residential (unsewered) development in an area referred to as Marulan South (Figure D). It appears this area is being put forward in place of former Deferred Area 16 which lies south of the railway line. Both former Deferred Area 16 and the current Marulan South Opportunity Area have significant water quality risk constraints. Based on the results of the SLWCA for Residential Unsewered Lots (4,000m² to 2ha), both areas are characterised by Moderate to Extreme Risks to water quality, with most of the land being dominated by an Extreme risk. The Marulan South area contains a number of 1st and 2nd order drainage features and, as raised earlier, the constraints analysis, does not take into account the WaterNSW is generally not supportive of unsewered development occurring in this area.</p> <p>As an alternative, based on results of the SLWCA for Residential Unsewered Lots (4,000m² to 2ha), areas south-west of Marulan between the Main Southern Railway and Hume Highway have land areas that vary from Low to Extreme Risk to water quality, with more areas of Low Risk potentially available for development. WaterNSW would welcome the opportunity to discuss with Council whether this area might be more suitable in providing a limited supply of Large Lot Residential housing.</p> <p>Large Lot Residential Demand and Supply</p> <p>The draft Strategy (Table 17) indicates that during the past decade there has been 820 approvals for dwellings, however there is no breakdown of dwelling approvals between serviced residential allotments and unserviced rural-residential allotments on larger blocks. This makes it difficult to understand the demand for unserviced rural residential type dwellings. The Strategy seems to use zoning as a surrogate for rural residential development, noting, that rural residential development is typically located in land zoned R5 Large Lot Residential, RU6 Transition and E4 Environmental Living and with MLSs ranging from 2,000m² to 10ha depending on zoning and MLS requirements (pages 55-56). The Strategy identifies that 290 lots have been created in Goulburn over the past decade while, over this same period, approvals have been granted for 200 dwellings. It concludes that there is around 4.5 years supply of large lots for Goulburn.</p> <p>It is not clear whether the figures of 290 and 200 have been derived from an analysis of R5 zoned land only (as stated on page 60), or derived from an analysis of RU6 and E4 zoned land (as implied on page 56). If the former, then the analysis would benefit by including lot demand and supply information for RU6 and E4 zoned land. It may well be that there is a greater available supply of rural residential land than</p>

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Agency	Issues Raised
	<p>suggested, thereby reducing the immediate need for further rezoning and changes to MLSS to facilitate more unsewered development.</p> <p>Section 9.1 Direction 5.2 Sydney Drinking Water Catchment</p> <p>The Draft Strategy overviews the key provisions and principles of the Section 9.1 Direction 5.2 Sydney Drinking Water Catchment in Appendix A, recognising its objective to protect water quality and that it applies to planning proposals within the SDWC. Inclusions of these provisions are supported. This section would also benefit by cross-referencing the results of the SLWCAs.</p> <p>State Environmental Planning Policy (Sydney Drinking Water Catchment) 2011.</p> <p>The Draft Strategy includes a brief summary about the role of the SDWC SEPP on pages 5-6 that would benefit by explicitly stating that the SEPP actually requires new development to have a NorBE on water quality. A similar statement could also be made in the last paragraph about the SEPP as contained in Appendix A.</p> <p>Sydney Drinking Water Catchment – Definition</p> <p>The draft Strategy (page 64) includes information about the SDWC, drawing from key requirements of the SDWC SEPP and Direction 5.2, as well as addressing key constraints to residential land use from a water quality perspective. These provisions are supported. The Strategy may benefit by including a link to a map of the Sydney Drinking Water Catchment as provided here: https://www.waternsw.com.au/_data/assets/pdf_file/0004/55975/Fact-sheet-and-map-Sydney-drinking-water-catchments.pdf</p> <p>Section 5 – Actions</p> <p>Strategy I1 (page 126) includes three actions to assist water quality and water management. WaterNSW is supportive of the three actions but makes the following suggestions:</p> <p>Action I1-1 requires the consideration of the impact of urban development on the SDWC in the Planning Proposal. This Action could be expanded to read "...consider the impact of urban development on water quality in the Sydney Drinking Water Catchment...".</p> <p>The action concerning the inclusion of WSUD in Development Control Plans (DCPs) should be numbered I1-3.</p> <p>Other Issues</p> <p>The maps presented in Figures C and 24 of the Strategy would benefit by clearer positioning the call out text so that it does not truncate Precinct boundaries.</p> <p>The Tables on page xv identify 30 Large Lot Dwellings for Gorman Road whereas Figure C identifies 24 lots. <i>Council Note: 24 is correct.</i></p> <p>The paragraph at the top of page x regarding large lot development and the RU6 land at Marulan should be clarified in terms of the statements made and the arguments presented. The second sentence states that this 'does mean that the land is suitable for development. Is the word 'not' missing from this sentence? It is also unclear how the argument to protect the said areas from fragmentation (urban or environmental) accords with the need for 10ha allotments, and whether the fragmentation issue raised is in relation to fragmentation from urban or rural environments.</p>

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Agency	Issues Raised
	<p><i>Response/Comment:</i></p> <p><i>The Marulan North long term opportunity area requires protection from urban fragmentation. This has been clarified in the Strategy as 10ha interim lots to allow the short term opportunity area contiguous to the existing town to develop first, and provision for future re-subdivision of the long term opportunity area as serviced 700sqm lots.</i></p>

1.8 Clarification

Water NSW's submission essentially advises that all development in Marulan precincts should be serviced by sewer. Additionally, it was evident from various submissions that clarity over the Marulan staging was required.

Marulan North

Opportunity areas have been revised to propose 10ha lots in the interim for the future opportunity area with vehicle access from the south to maintain the effectiveness of the Gunlake Quarry haulage route. These lots would need a re-subdivision master plan that works with the layout of the short term opportunity area. The short term opportunity area is for 700sqm serviced residential lots, accessed from the south and with a layout facilitating future long term 700sqm lots further north.

Marulan South

The Large Lot Residential opportunity area identified in the revised Draft Strategy has resulted in submissions from Water NSW, DPIE Geoscience and Boral. Water NSW is concerned at the potential risk to water quality which is rated as generally extreme in this location for unsewered residential development in Water NSW's Strategic land and Water Capability Assessment. DPIE Geoscience and Boral both raised concern regarding future residential interface with the railway side line to the quarry. The main issue, is however, the risk to water quality for unsewered residential development, as identified by Water NSW, which is the basis for excluding the area for inclusion as a Large Lot Residential Opportunity area in the Strategy.

Large lot residential demand and supply

In determining supply of rural residential land, the analysis went beyond land zoned R5 to determine supply. Council also undertook an assessment of rural and environmentally zoned land within the Strategy investigation area to determine the number of remaining lots available.

To determine supply Council also looked at the subdivisions which had occurred within the unsewered land zoned rural or environmental within the Strategy investigation area and looked at the time taken between the subdivision being approved and the approval of applications for dwellings. Therefore, on this basis it is considered that the estimates in the Strategy for this category of development are as accurate as they can be with the data available.

1.9 Key Issues

The key issues raised during re-exhibition are summarised in the following table. The table also includes a comment by way of response.

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Issue	Response
Biodiversity and validation of HEV data	<p>Validation of HEV has proven to be almost impossible over the whole of the precinct areas. This is due mainly to the age of the data sets that are published for HEV. Since the data sets are unreliable, it is going to be a matter of assessment with each subsequent Planning Proposal to ground truth and determine extents of HEV on each property and associated constraints.</p> <p>HEV data has not been validated for all the precinct areas as this is considered to be a hugely expensive task for a fairly high level strategy. This point has been made clearer in the Strategy.</p> <p>Planning proposals will be dependent on the validation of HEV to occur subject to further assessment of the land identified in the Strategy.</p> <p>No areas with an environmental zoning are proposed to be rezoned to another category. Refer Strategy Actions H1 1 and H1 - -2.</p> <p>Opportunities for strategic biodiversity certification under the <i>BC Act 2016</i> will be considered with future planning proposals following the adoption of the Strategy.</p>
Precinct Maps	<p>Minor corrections have been made to improve legibility of the precinct maps. Please note that where HEV and Bushfire Prone Vegetation Category 1 overlap, the result is a light brown colour on the maps.</p> <p>Where an opportunity area is identified, boundaries are indicative only and need to be refined based on various site-specific studies prior to any development.</p>
South Marulan Large Lot Residential and Effluent Management Areas (EMAs)	<p>Further consideration of South Marulan's suitability for unserviced Large Lot Residential use will need to be undertaken in light of the water quality issues and interface issues raised in the DPIE (Geosciences) and Boral submissions.</p> <p>In an earlier Draft of the Strategy (pre-exhibition), the EMA 100m buffer was identified on the constraints and opportunities maps for the relevant precincts where rural residential opportunities were identified. The inclusion of the EMA buffers in the mapping resulted in the maps being very hard to read. It was for this reason that a written comment about this constraint was included to the relevant precincts being the: Mt Gray East Mountain Ash, Brisbane Grove and Marulan South precincts, but has now been included in other precincts where smaller areas of rural residential is identified such as Gorman Road.</p> <p>Given the nature of the Strategy, the identification of opportunity areas and yields is by necessity based on a very broad consideration. Essentially to go into much more detail will require more targeted analysis which should occur at the planning proposal stage. It is agreed that this may</p>

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Issue	Response
Gas Pipeline	<p>result in lesser yields than those specified in the Strategy. This point has now been made clearer in the Strategy.</p> <p>DPIE's submission specifically advises in relation to the gas pipeline that Council refer to the Department's Planning Circular in the Strategy in relation to buffer and other mitigation requirements for development proposals on land adjoining the Gas Pipeline.</p> <p>The circular mainly relates to the provisions of SEPP Infrastructure, in particular Clause 66C which requires the consent authority to:</p> <ul style="list-style-type: none"> a) be satisfied that the potential safety risks or risks to the integrity of the pipeline that are associated with the development to which the application relates have been identified, and b) take those risks into consideration in the assessment of development. <p>In taking 'those risks into consideration' it is acknowledged that the construction type, size, depth and the type of dangerous good within each of the high pressure pipelines listed under clause 66C will vary, resulting in each pipeline having a different risk profile.</p> <p>There are certain types of developments such as high density residential, commercial or sensitive uses such as hospitals, schools, child care and aged care facilities which should be considered more carefully by the consent authority as they may introduce a higher or more vulnerable population near the pipelines listed under clause 66C.</p> <p>Such development should consider preparing a risk assessment as part of the development application to demonstrate that the development will comply with the risk criteria for land use safety planning published in <i>Hazardous Industry Planning Advisory Paper No. 4 – Risk Criteria for Land Use Safety Planning</i>. It is important to have a comprehensive understanding of the hazards and risks associated with the operation of the pipeline and of the adequacy of safeguards.</p> <p>In assessing the tolerability of risk from high pressure pipelines, both qualitative and quantitative aspects need to be considered.</p> <p>Any quantitative (numeric) risk assessment should be consistent with the principles published in <i>Hazardous Industry Planning Advisory Paper No. 6 – Hazard Analysis</i>. The risk assessment is to be performed by a suitably qualified professional. This assessment is the responsibility of the applicant and must be undertaken in consultation with the pipeline operator. The risk assessment will need to be undertaken by the proponent at the planning proposal stage.</p>
Prioritisation of opportunity areas	<p>The short, medium and long term prioritisation of precinct opportunity areas is based on an assessment of how much land is needed and how well placed each precinct is to provide it in the short term. It is acknowledged that some</p>

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Issue	Response
	<p>landowners are ready and willing to develop their land immediately, while others may wish to retain larger blocks and not subdivide at all. The market will also play a role in pricing, the speed of land uptake and dwelling construction. This means that in practice, the 'medium and long term' may arrive faster in some precincts than others.</p> <p>The identification of the Baw Baw, northern section of Middle Arm and Marulan North Precincts as a longer-term priority is based merit relative to the other precincts identified and the need for the release of this area in the short term given the identification of supply elsewhere. These areas are recognised as providing development opportunities once the other precincts have been filled, but could be brought forward if other precincts are not developed in the short to medium term.</p>

1.10 Conclusion

The consultation for the Strategy has undertaken in three stages with opportunities for feedback throughout the process. The initial consultation highlighted a number of issues that needed to be considered in the delivery of housing.

The feedback received following each Public Exhibition period has been included into the Final Strategy document.

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A Talk of the Town



TALK OF THE TOWN

We want to talk...

..about housing in *your town*



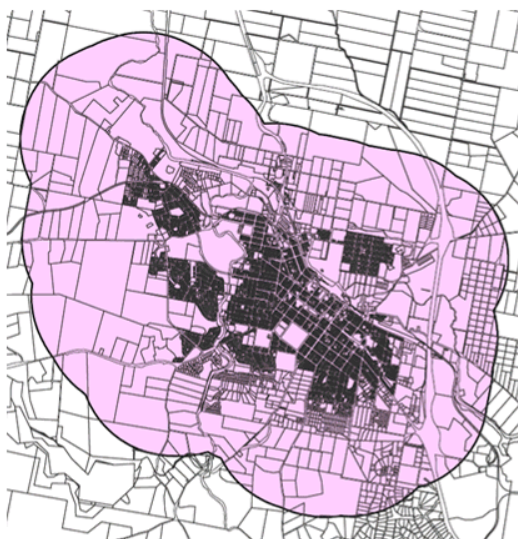
Housing Strategy—Pre-Strategy Consultation



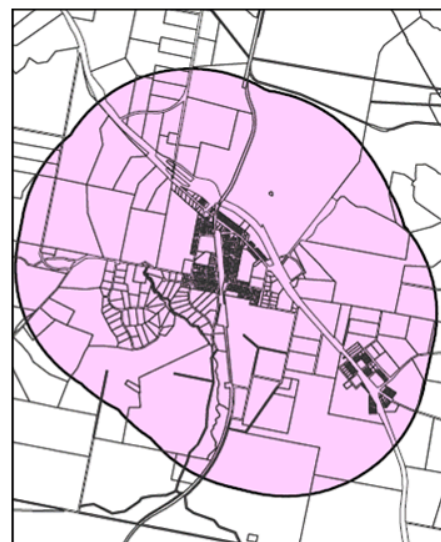
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Schedule of Consultation Events	
Date	Event
9th April—25th May	Consultation Period Library and Foyer Pop Ups
3rd May, 5:30pm	Marulan Workshop Community Hall (170 George Street)
10th May, 5:30pm	Goulburn Workshop Council Chambers (184–194 Bourke Street)
15th May, 2–6pm	Marulan Drop In Community Hall (170 George Street)
17th May, 4pm	Industry Workshop Facilitated Session
22nd May, 2–6pm	Goulburn Drop In 213–215 Auburn St



Goulburn Study Area for Housing Strategy



Marulan Study Area for Housing Strategy

THE PROJECT

Council is interested to hear what you have to say about housing, to accommodate growth in Goulburn and Marulan over the next 20 years before we start preparing a Housing Strategy.

To give some background and start you thinking we've prepared five **Talk of the Town: Housing Residential Growth** information sheets:

- ◇ Sheet 1: Background
- ◇ Sheet 2: Affordability, infrastructure & Council's role
- ◇ Sheet 3: Social needs & opportunities & Environmental considerations
- ◇ Sheet 4: The Role of planning policy & principles to guide decision-making
- ◇ Sheet 5: Study area maps

The information sheets, this pamphlet and online survey questions form the basis of the consultation.

At the conclusion of the consultation period staff will collate the feedback received and it will be used to inform the preparation of a Housing Strategy for Goulburn and Marulan.

This strategy is to be prepared by a consultancy in close association with Council's Strategic Planning branch. Preparing the strategy will involve detailed investigations and research.

It is anticipated that the draft strategy will be prepared by October. At that time the draft Strategy will be placed on public exhibition for further community feedback.

WHAT WE WANT TO KNOW

We are keen to hear what you think the key issues are that need to be taken into account when preparing the Housing Strategy. We are interested in finding out what kind of housing options should be provided and where.

Should we have single houses, duplexes and granny flats or more dense developments such as shop-top housing, villas, terraces and apartments or a combination of all?

Where are these different types of housing best suited? What makes a town a good place to live?

How affordable do you think it is to live in Goulburn and Marulan?

What do you want the urban areas of Goulburn and Marulan to look like in 20 years?

Do you agree with our principles for decision making on housing in 'Talk of the Town Information Sheet 4'?

If you have an opinion we would like to hear it!

There's a variety of ways you can have your say on this important project.....



"Tell us what you think!"



YOUR INVOLVEMENT

The program of events is included in this pamphlet. But we will be doing our best to make sure you know what's happening. We have created a project page with all the key documents and information—visit

<https://yoursay.goulburn.nsw.gov.au/projects/urban-fringe-housing-strategy>

Hard copies of the information sheets are available at the Civic Centre and Library located at 184-194 Bourke Street, Goulburn.

As well as our online platform we will be accepting written submissions.

Please send your submission clearly indicated as 'Housing Consultation Submission' to the General Manager via any of the following methods:

- Email council@goulburn.nsw.gov.au
- Post to Locked Bag 22, Goulburn NSW 2580
- Hand to Customer Service staff at the Civic Centre, 184-194 Bourke Street, Goulburn

The exhibition period will conclude on 25 May 2018.

For any enquiries or if you want to discuss your submission please contact Council's Strategic Planning Team (Bennett, Alex, Nick or Emma-Jayne).



We are investigating housing in Goulburn and Marulan to create a HOUSING STRATEGY that will guide residential development in and around these urban centres over the next 20 years.

We will be developing a similar strategy for the villages and rural areas when this one is completed.

THE CHALLENGE IS TO HOUSE..

5700 more people over the next **20 years**

(Current Goulburn Population: 23,635)

(Current Marulan Population: 1,178)

These figures were provided by the Department of Planning and Environment for the whole LGA however the majority of development will be around Goulburn and Marulan. The total population for Goulburn Mulwaree in 2018 is 30,010.

To give you an idea of what that rate of dwellings per year looks like, between 2009 to 2017 (**8 Years**) **583** Lots were approved in the Marys Mount in Goulburn alone (=72 lots per annum)



By comparison, between 2007-2017, 1,303 dwellings (total of all configurations) were approved in the whole of Goulburn city. That's an average of 130 residences p.a.

To find out how you can be involved visit: <https://yoursay.goulburn.nsw.gov.au/projects/urban-fringe-housing-strategy>

1



Starting the discussion.....

Development of the Marys Mount release area in Goulburn has taken up approximately 82.4 hectares of land (that's 100 rugby league fields). Additional lots in the pipeline will occupy a further 90.7 hectares (that's 107 rugby league fields) in Goulburn and 49 hectares in Marulan.

With an estimated 500 additional lots in the pipeline (just for Marys Mount), this would indicate that we have an adequate supply for the next five years and don't need to rezone land immediately.

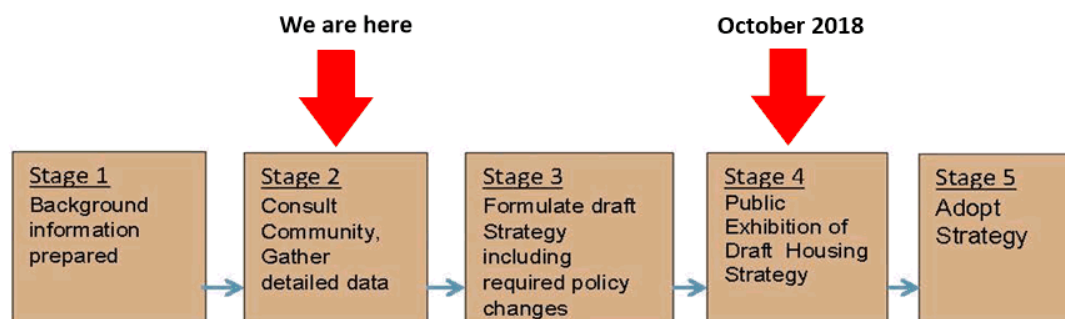
To discuss housing residential growth and before we prepare the Housing Strategy there are a number of issues that need to be discussed.

These issues are outlined in the accompanying Housing Residential Growth sheets, including:

- ⇒ Affordability (Sheet 2)
- ⇒ Infrastructure to support growth (Sheet 2)
- ⇒ Council's role (Sheet 2)
- ⇒ Social needs & opportunities (Sheet 3)
- ⇒ Environmental considerations (Sheet 3)
- ⇒ The role of planning policy (Sheet 4)
- ⇒ Planning Principles to guide our decision making (Sheet 4)

Housing Strategy Study Area & Process

Two areas are the focus of residential growth for this discussion; the Urban area and the Fringe area (see the maps on Sheet 5) for both Goulburn & Marulan. We are engaging with the community at any early stage so that feedback can inform preparation of the Draft Strategy.



To find out how you can be involved visit: <https://yoursay.goulburn.nsw.gov.au/projects/urban-fringe-housing-strategy>



TALK OF THE TOWN

Housing Residential Growth



Sheet 2 of 5

Affordability

Affordability is a big issue. We know, big house, big price but conversely smaller house, smaller price.

Not everyone wants or needs to live in a 3+ bedroom house. Indeed a 2 bedroom apartment can be more affordable close to the urban centre with easy access to shops, entertainment and other services. This type of housing can suit many lifestyles and family circumstances and can be bought for a fraction of the cost of a detached dwelling on the outskirts of town.

Housing affordability can be addressed with

rezoning of land to maintain the supply of residential building blocks, combined with ensuring a range of housing options (including smaller dwellings) to cater for different households. The end result should be that the supply and type of housing to meet future demand should keep pace with demographic trends.

Goulburn	Mar 2018	2017	2006
Median House price and rental	\$400,000	\$374,000	\$210,000
3 Bedroom detached dwelling (to buy)	\$375,000	\$339,000	\$210,000
(Rent)	\$350	\$330	-
2 Bedroom Apartment (to buy)	\$240,000	\$194,000	\$170,000
(Rent)	\$245	\$220	-

Infrastructure

Goulburn and Marulan are located in the Sydney Drinking Water Catchment therefore all new housing blocks on the edge of town must be connected to sewerage services. The cost of extensions and augmentation is passed on to land purchasers. Adding more housing in established areas avoids this cost.

Accommodating growth in population comes with other infrastructure requirements such as power and gas but also the requirements for schools, roads and walkways, open space, sports fields and amenities and infrastructure such as libraries, community and youth meeting spaces and art & cultural facilities.

However our urban areas develop, these matters need to be considered up front in order to create liveable communities whose development does not place an unreasonable burden on existing residents and services.

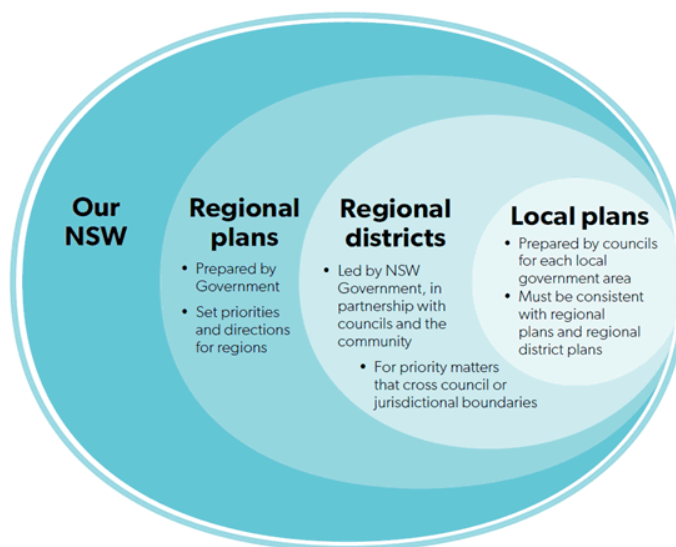
To find out how you can be involved visit: <http://yoursay.goulburn.nsw.gov.au/projects/urban-fringe-housing-strategy>

1



Council's Role

The Housing Strategy is a **Local plan** that will identify (through recommendations and actions) **what** sort of residential growth occurs, **where, when** and **how** in and around the urban centres of Goulburn and Marulan. The graphic is a visual representation of the broader strategic planning framework within which our work on housing will sit and have to align with.



Council has a leadership role in influencing the development of quality housing which meets the needs of the community.

Council can do this by:

- Undertaking robust and genuine community and stakeholder consultation
- Hearing community expectations and ideas and responding appropriately
- Using evidence, best available data and predictions to formulate policy actions
- Aligning housing policy with other strategic plans of Council and the State
- Integrating land use and infrastructure planning and delivery to create high quality living environments that bring growth
- Applying appropriate zoning to land and controls for housing in order to facilitate quality developments that are practical and have lifestyle and amenity aspects that contribute to quality of life
- Facilitating the housing industry and growth by providing high quality technical advice and support

The Housing Strategy that Council is preparing will consider **your submissions, responses to our online survey and responses we receive at workshops and drop-in days**. So check out <https://yoursay.goulburn.nsw.gov.au/projects/urban-fringe-housing-strategy> for more information or call Council and speak to a member of the Strategic Planning team.

To find out how you can be involved visit: <https://yoursay.goulburn.nsw.gov.au/projects/urban-fringe-housing-strategy>

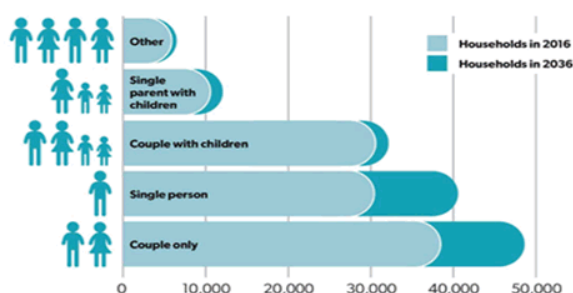


Social Needs & Opportunities

Changing Social Demands

Social changes have a direct impact on the demand for different types of housing. Population growth alone does not give the full picture. Census data means that, over time, we can see trends developing. The table from the South East & Tablelands Regional Strategy shows how household size is predicted to change in the region. These changes will have an impact on the demand for different types of housing.

Household Composition Forecast 2016-2036



In future the demand for smaller one and two bedroom houses & units will increase. The

Dwelling types in South East Tablelands and ACT (2011)

demand for large family sized dwellings may continue, but the demand for smaller, energy efficient and lower maintenance housing with good access to services and facilities will likely increase.

The number of those aged over 65 compared with younger population groups is predicted to increase (this is an ageing population) consistent with many other places in Australia and the developed world. This has implications for housing also.

Inclusive Housing

Changes in family and personal circumstances can result in a need for short term crisis accommodation. The need for such accommodation is important to consider in the housing mix. Employment and study can also drive the need for housing e.g. accommodation for short-term or contract workers or students. Housing that is suitable for all ages, life stages and abilities (known as adaptable housing) will allow flexibility to accommodate population growth and address the needs of residents. Housing for older people will become a priority as the population ages in the next 20 years.

Opportunity

Our Housing Strategy will set a direction to address the housing needs of our population and help guide what our communities will look like. The Housing Strategy should include actions to encourage developers to build the range of accommodation and dwelling types that will match the social needs of our growing population. It should also include actions that contribute towards liveable, safe and healthy communities. These actions can then be expressed through Council policy.

To find out how you can be involved visit: <https://yoursay.goulburn.nsw.gov.au/projects/urban-fringe-housing-strategy>



TALK OF THE TOWN

Housing Residential Growth



Sheet 3 of 5

Environmental considerations

A key consideration in planning communities is preservation of environmental values for amenity, sustainability and quality of life. Some existing urban land and fringe land contains environmentally significant vegetation communities protected by State legislation. It is important that these areas are identified, zoned appropriately and avoided for more intense development. It is also important to identify waterway corridors and protect these from degradation which may impact water quality.

The urban environment can contribute significantly to environmental quality and habitat for native animals through appropriate street tree and park/reserve plantings, urban and community gardens and protection of remnant vegetation in corridors across the landscape.

Vegetated areas are susceptible to bush fire and subdivisions and housing need to be designed to reflect that risk.

These factors will be considered when determining areas suitable for additional residential development.

Living on the Edge: Issues on the urban fringe

Extending the urban boundary into agricultural and environmentally sensitive areas can create potential land use conflicts and make developing land difficult.



Some effects of living near land used for agriculture include smells, noise, animal behaviour, transport movement and pasture improvement methods. This may result in complaints and the farmer's management practices and subsequent livelihood being restricted.

Our area also has significant quarry rock resources that are often hauled by heavy vehicles. Avoiding future urban areas that may be affected by such activities is important.

Land use conflict arises when incompatible land uses are located within insufficient distance of one another or without appropriate barriers to avoid negative impacts.

These impacts on the fringe can be reduced by maintaining a buffer area or separation distance between the rural and urban boundary and identifying a mix of compatible land uses.

The Housing Strategy has a key role in guiding policy around these issues and determining the best areas for settlement that avoid land use conflict issues.

To find out how you can be involved visit: <https://yoursay.goulburn.nsw.gov.au/projects/urban-fringe-housing-strategy>

2



The role of planning policy

Determining what housing goes where

The Goulburn Mulwaree Council (GMC) Local Environmental Plan (LEP) 2009 is the primary document that determines **what** can be done **where** (which is also why maps are so important in planning) by allocating a land use zone to the land. Each zone includes a range of land uses that are permissible and prohibited in that zone. A rezoning is simply a change in the zoning of land from one zone to another.

The LEP guides such things as building heights, subdivision, lot size and the size and coverage of buildings on a block. The LEP is also the place where buildings are identified as listed heritage items or identified as being within a heritage conservation area.

There is some flexibility with the kinds of planning controls that Council can have in its LEP but changes must be consistent with the NSW Government LEP template that applies across the State.

Determining how housing is developed

The GMC Development Control Plan (DCP) 2009 provides the detail around **how** development of land can be undertaken.

Housing provisions in the DCP include guidelines on building setbacks, subdivision & house design, standards for roads, development of heritage items, standards for open space required per dwelling, fences and development on flood prone land.

These controls can be much more detailed than in the LEP, aren't subject to a standard format and can be entirely approved by Council.

Why have your say?

The Housing Strategy that Council is preparing will consider **your submissions, responses to our online survey and responses we receive at workshops and drop-in days**. So check out <https://yoursay.goulburn.nsw.gov.au/projects/urban-fringe-housing-strategy> for more information or call Council and speak to a member of the Strategic Planning team.

The recommendations of the Housing Strategy when it is prepared will guide changes to both the LEP & DCP to achieve the outcomes for housing identified through both consultation and detailed technical investigations.

It will also guide where, how and when any additional residential areas (including rural residential areas) are released for development to cater for population growth over the next 20 years. It will also help Council to provide corresponding infrastructure and services efficiently.

The Strategy will be the Local Plan that will form part of the hierarchy of documents within the Strategic Planning framework (see Sheet 2).

To find out how you can be involved visit: <https://yoursay.goulburn.nsw.gov.au/projects/urban-fringe-housing-strategy>

1



Principles to guide our decision-making

Making decisions about where, how, when and in what form housing is to be provided to accommodate population growth over the next 20 years needs to be based on the best data we have access to and grounded by a set of principles based on best practice. We have compiled a set of principles below to start the discussion....

APPROPRIATE ZONES & CONTROLS

- A palate of zones should be applied both in the urban centre and on the fringe based on the characteristics of land including those to encourage the protection of existing environmentally sensitive areas.
- Protect areas that contain important resources and minimise the potential for land use conflict.
- Maintain & enhance links with the natural environment for recreational use and animal habitat and apply a zone which reflects that function.
- Minimise the impact of housing and related development like sheds on the landscape, particularly on the fringe.
- Protect areas of high environmental value, scenic value and cultural heritage value.

INCREASING DENSITIES TOWARDS THE CENTRE OF TOWN

- Focus urban areas where residents can access services, jobs and transport.
- Protect the Region's water supply and the environmental qualities of rivers and streams.
- Generally not apply a subdivision lot size to an area that is less than a lot size closer to the centre of town.
- Development should be maximised closer to available services and traffic infrastructure.
- Not support any rezoning that would result in isolated pockets of residential land away from the existing urban boundary.
- Protect important agricultural or resources land from encroachment by housing on the fringe.
- Staging of land release must begin closest to the existing urban boundary.

PROVIDING A VARIETY OF HOUSING OPTIONS

- Provide affordable housing opportunities in Goulburn and Marulan that respond to demographic change.
- Allow sensitive and complementary development and adaptation for housing in heritage areas.
- Apply design excellence to medium density and multi-dwelling housing opportunities.
- Provide a mix of housing options in medium density multi-dwelling developments.
- Design new neighbourhoods so they are environmentally sustainable, socially inclusive, easy to get to, healthy and safe.

STAGING OF LAND RELEASES

- Provide measurable milestones for the release of land so that take-up and remaining supply can be readily determined.

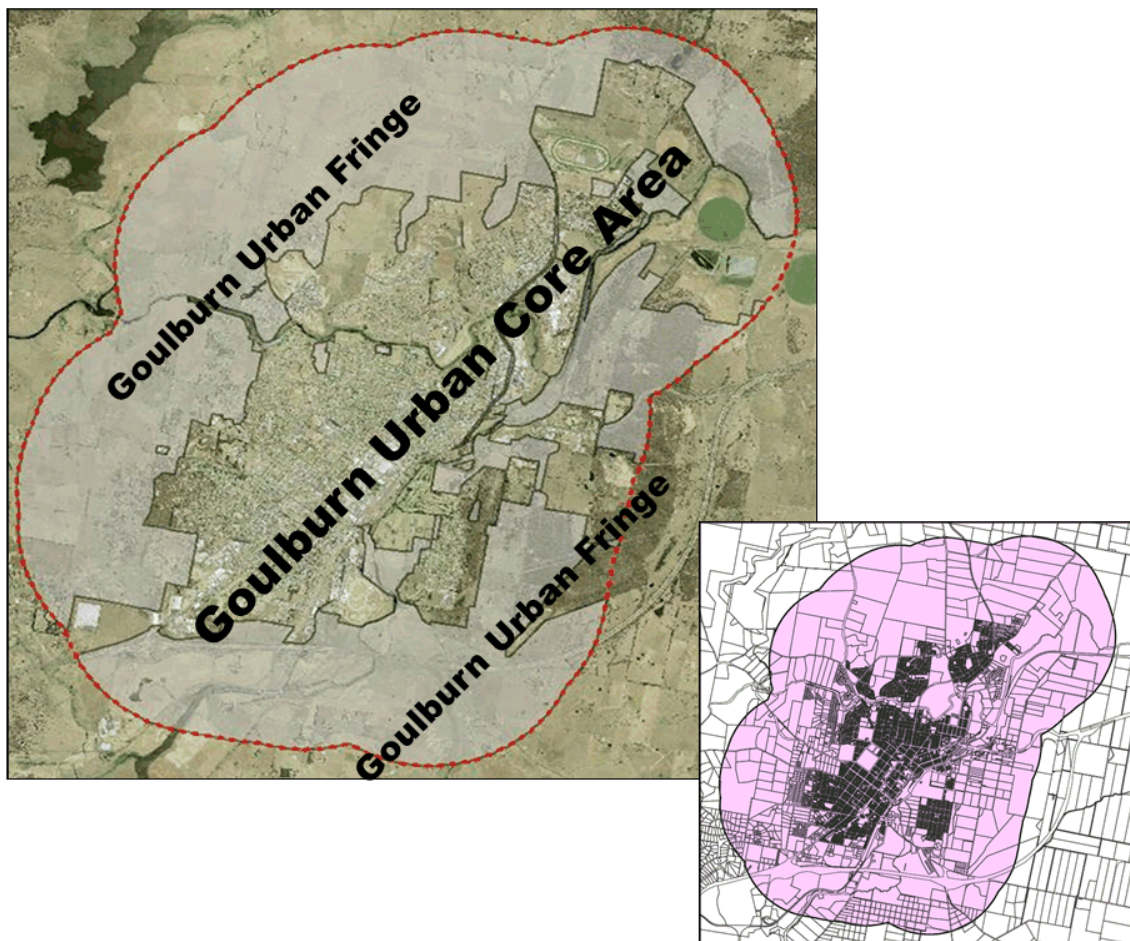
To find out how you can be involved visit: <https://yoursay.goulburn.nsw.gov.au/projects/urban-fringe-housing-strategy>



Our Study Area for the Housing Strategy— Goulburn

The aerial photo below is of Goulburn. The unshaded area towards the centre is classified as the urban core. The shaded area represents the urban fringe which is the area between the urban core and the rural area beyond.

The Housing Strategy will address housing development in the urban core of Marulan and Goulburn based on predicted population growth. Detailed investigations may identify potential new land releases for residential or rural residential development on the fringe.



To find out how you can be involved visit: <https://yoursay.goulburn.nsw.gov.au/projects/urban-fringe-housing-strategy>

1



Our Study Area for the Housing Strategy—Marulan

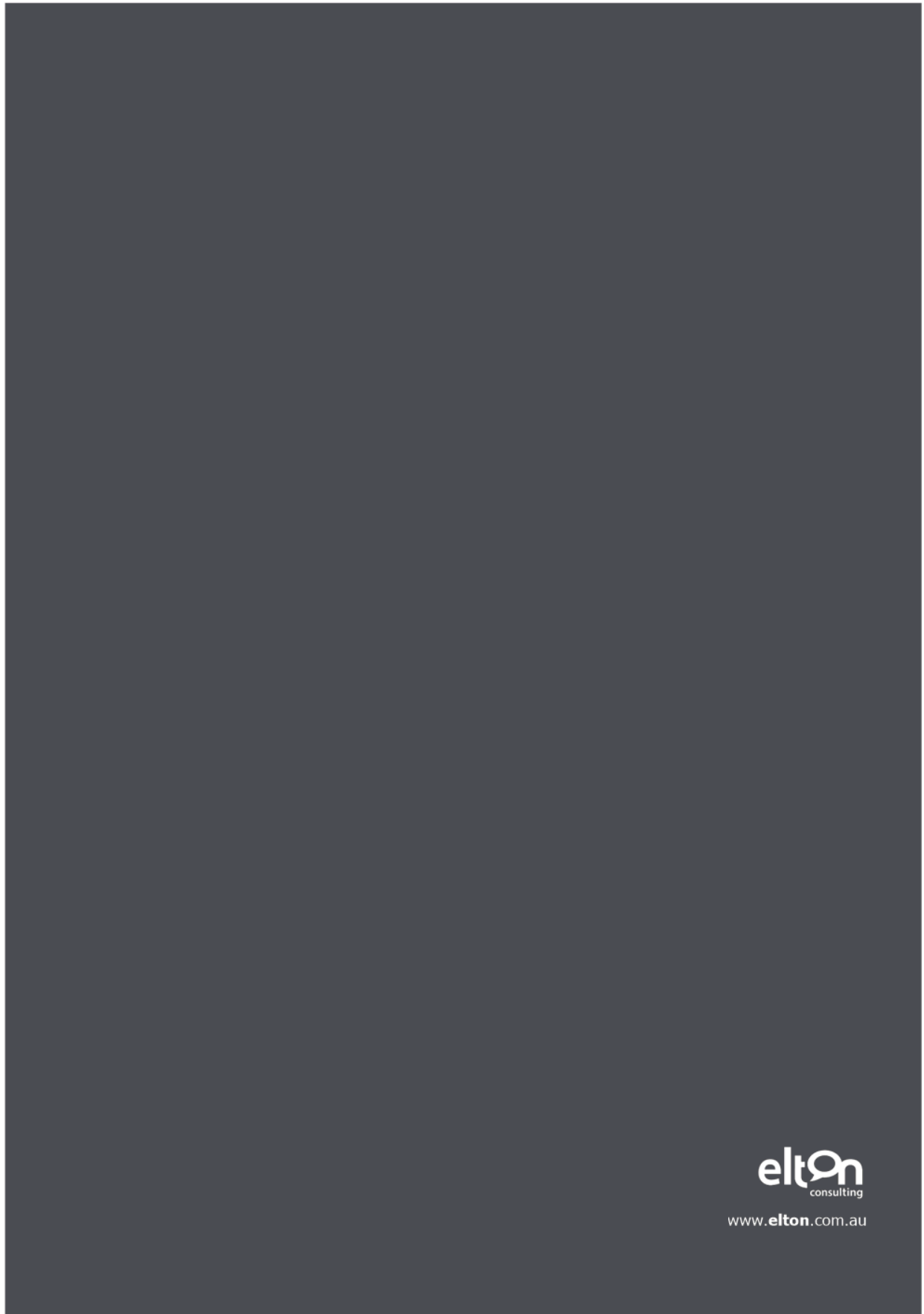
The aerial photo below is of Marulan. The unshaded area towards the centre is classified as the urban core. The shaded area represents the urban fringe which is the area between the urban core and the rural area beyond.

The Housing Strategy will address housing development in the urban core of Marulan and Goulburn based on predicted population growth and detailed investigations may identify potential new land releases for residential or rural residential development on the fringe



To find out how you can be involved visit: <https://yoursay.goulburn.nsw.gov.au/projects/urban-fringe-housing-strategy>

2



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From: George Curtis <George.Curtis@planning.nsw.gov.au>
Sent: Thursday, 19 December 2019 4:06 PM
To: Submissions
Cc: Graham Towers; Kate Wooll
Subject: draft Urban and Fringe Housing Strategy

Dear Kate

Thank you for the opportunity to comment on the draft Urban and Fringe Housing Strategy.

The revised draft Strategy is considered to be significantly improved. The precinct based approach to new development areas is strongly supported. The provision of a variety of housing types including low and medium density, including infill opportunities, as well as additional large lot residential opportunities is also supported.

Consistency with South East and Tablelands Regional Plan:

* A number of the proposed development precincts, e.g Marulan South, Run-O-Waters (Rural North) appear to contain verified high environmental value (HEV) land. The inclusion of validated HCV land in the estimated dwelling yields may create an unrealistic development expectation. It is suggested that Council consider revising the proposed development footprints to avoid validated HEV land consistent with the stated intent of the draft Strategy and requirement of Directions 14, 15 and 28 of the South East and Tablelands Regional Plan.

* It's unclear from the Strategy whether HEV data has been validated for all of the proposed development precincts or just for specific properties. Council could consider identifying in the Strategy if additional validation is required for specific precincts to inform the preparation of a planning proposal.

Population projections:

Updated population projections have recently been released for Goulburn Mulwaree LGA. These are available on the Department's website <https://www.planning.nsw.gov.au/projections>.

Eastern Gas Pipeline:

It is suggested that Council refer to the Department's Planning Circular in the Strategy in relation to buffer and other mitigation requirements for development proposals on land adjoining the Gas Pipeline. <https://www.planning.nsw.gov.au/-/media/Files/DPE/Circulars/planning-circular-18-010-act-and-regulation-changes-2018-10-26.pdf?la=en>.

Constraints/opportunity mapping:

* It's unclear what the green squares around the proposed development area on the Marulan South Opportunity Map represent. Suggest these are included in the key to the map.

* Arrows linking text boxes with proposed development areas are missing on the Gorman Road, Mt Gray East, Kenmore, Run-O-Waters (Rural North) opportunity maps.

Ministerial Directions:

* Ministerial Direction 2.1 Environment Protection Zones is also relevant to the Strategy because it applies to all environmentally sensitive areas, not just to environmental zones.

* Suggest that reference to Direction 5.1 Implementation of Regional Strategies is removed because the Direction was revoked on 17 October 2019.

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Other:

* Suggest removing section 1.2.4 “Sydney Canberra Corridor Regional Strategy” because the Regional Strategy is no longer relevant as it has been replaced by the South East and Tablelands Regional Plan.

Don’t hesitate to contact me.

Regards

George Curtis
Senior Planner, Southern Region

Local and Regional Planning | Department of Planning, Industry and Environment
T 42471824 | E george.curtis@planning.nsw.gov.au
84 Crown St, Wollongong NSW 2500 | PO box 5475, Wollongong NSW 2520
www.dpie.nsw.gov.au

The Department of Planning, Industry and Environment acknowledges that it stands on Aboriginal land. We acknowledge the traditional custodians of the land and we show our respect for elders past, present and emerging through thoughtful and collaborative approaches to our work, seeking to demonstrate our ongoing commitment to providing places in which Aboriginal people are included socially, culturally and economically.

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Planning,
Industry &
Environment

The General Manager
Goulburn Mulwaree Council
Locked Bag 22
Goulburn NSW 2580

Council@yass.nsw.gov.au

Attention: Kate Wooll

18 December 2019

Our ref: DOC19/978892-4

Your ref: Goulburn Draft Urban and Fringe
Housing Strategy

Dear Ms Wooll

Subject: Goulburn Draft Urban and Fringe Housing Strategy

I refer to your request for the Department of Planning, Industry and Environment (the Department) to review and provide comments on the Goulburn Draft Urban and Fringe Housing Strategy. We have reviewed the strategy and acknowledge that our previous comments on earlier iterations of the strategy have been taken into consideration.

It is important that the strategy identifies early in the planning process, the important high environmental value areas to be avoided in the subsequent rezoning process. This has largely been achieved with areas of validated moderate/good condition box woodland and temperate grassland EECs being excluded from the growth areas. There are some isolated patches of these communities remaining in the identified areas, but these can be protected through the LEP amendment process.

However, we still have some concerns and suggestions as set out below;

Aboriginal cultural heritage

The Department supports the approach of early consideration for future development areas. We reiterate our previous comments to council regarding the need for comprehensive Aboriginal cultural heritage assessments to be completed upfront as part of any subsequent planning proposal. This would identify Aboriginal cultural heritage values upfront and allow for appropriate management measure to be considered and impacts avoided where possible. Undertaking studies early in the strategic planning stage is consistent with the Direction 23 actions outlined in the South East and Tablelands Regional Plan 2036 and provides greater certainty for stakeholders in any development assessment process.

See attachment 1 for detailed comments and specific advice regarding the individual precincts discussed in the Strategy.

Flooding

It is acknowledged that the study has addressed our previous comments. We encourage council to continue to work collaboratively with us to obtain reliable flood risk management information to inform the management of flood prone land in plans such as the Urban and Fringe Housing Strategy.



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Biodiversity

I refer to the *South East and Tablelands Regional Plan 2036* (the Regional Plan) and *Ministerial direction 2.1 - Environment Protection Zones* which both provide guidance on the location of rural residential areas, and for planning proposals to facilitate the protection and conservation of environmentally sensitive areas.

Based on these provisions, we recommend that;

- There is no large lot residential development planned for areas with validated HEV, keeping in mind that areas of HEV must be validated prior to a planning proposal being considered.
- This validation process should be carried out by a qualified ecologist in accordance with the guidance in the Regional Plan.
- Areas that are already zoned Environmental should not be rezoned to a different zone that offers less protection.
- Any split zones should be rezoned in favour of environmental zones.

In addition, consideration should be given to the potential for using the provisions of the *Biodiversity Conservation Act 2016* which provides an opportunity for council to implement strategic biodiversity certification of areas of land that they want to develop in the future. Strategic biodiversity certification is available only to planning authorities, to support significant regional development and planning processes.

Please refer to Attachment 2 for further information and specific advice regarding the individual precincts discussed in the Strategy.

If you wish to discuss the contents of this letter further, please contact Lyndal Walters on 02 6229 7157.

Yours sincerely,

A handwritten signature in black ink, appearing to read 'Allison Treweek'.

ALLISON TREWEEK
Senior Team Leader – Planning
South East, Biodiversity and Conservation



Attachment 1 – Specific comments on the Goulburn Draft Urban and Fringe Housing Strategy relating to Aboriginal cultural heritage

The Goulburn and Marulan townships have already been identified in the 2012 Goulburn Mulwaree LGA Aboriginal Heritage Study (Figures 6.2 and 6.3) and 2009 Goulburn Mulwaree DCP (Figure 3-2) as areas containing Aboriginal significance. Aboriginal sites are already known to occur within several the Precincts and there is a high likelihood that further Aboriginal objects and cultural values exist within areas identified in the strategy.

Areas planned for development within most of the Precincts will require a comprehensive Aboriginal cultural heritage assessment as part of any future Planning Proposal in line with Ministerial Directions - 2.3 Heritage Conservation, Direction 23 actions outlined in the South East and Tablelands Regional Plan 2036 and legislative requirements in the *National Parks and Wildlife Act 1974*. Undertaking assessments upfront would identify any Aboriginal cultural heritage values and apply an appropriate management measure that would allow for impacts to be avoided. Undertaking studies early in the strategic planning stage provides greater certainty for stakeholders in any development assessment process.

The Department is not in a position to support or object to any of the precinct areas at this stage without a consideration of likely impacts to Aboriginal cultural heritage values. Further information and specific advice regarding Aboriginal cultural heritage matters for individual precincts is detailed in the Tables below:

Table 1: Precincts and opportunities for development – Aboriginal cultural heritage - Goulburn

Precinct name	Note	Recommendation
Precinct 1 - Run 'O' Waters (existing)	Aboriginal sites have already been recorded within the north west and south east corners and along the eastern boundary of this precinct.	Areas planned for development within this Precinct will require a comprehensive Aboriginal cultural heritage assessment.
Precinct 2 – Run 'O' Waters (rural north)	Aboriginal sites have already been recorded within the south western area of this precinct and just outside the eastern boundary.	Disagree that the precinct can be considered 'generally unconstrained' without any Aboriginal cultural heritage assessment to support this. Areas planned for development within this Precinct will require a comprehensive Aboriginal cultural heritage assessment.
Precinct 3 – Baw Baw	One Aboriginal site has been recorded within the north east area of this precinct. Potential for Aboriginal objects to occur along and close to the Wollondilly River.	We note there is no change proposed for this precinct at this time. Any future plans for development within this Precinct will require a comprehensive Aboriginal cultural heritage assessment.



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Precinct name	Note	Recommendation
Precinct 4 – Sooley	No Aboriginal sites have been recorded within this precinct to date. Potential for Aboriginal objects to occur along and close to the Wollondilly River.	Any future plans for development within this Precinct will require a comprehensive Aboriginal cultural heritage assessment.
Precinct 5 – Middle Arm West	Aboriginal sites have already been recorded within the south area of this precinct. Aboriginal sites have been recorded as part of previous surveys for the existing subdivisions to the south.	Areas planned for development within this Precinct will require a comprehensive Aboriginal cultural heritage assessment.
Precinct 6 – Middle Arm East	Aboriginal sites have already been recorded within this precinct.	Areas planned for development within this Precinct will require a comprehensive Aboriginal cultural heritage assessment.
Precinct 7 – Kenmore	A number of Aboriginal sites have already been recorded within this precinct as part of the Goulburn STP survey in 2003. Potential for Aboriginal objects to occur along and close to the Wollondilly River.	Areas planned for development within this Precinct will require a comprehensive Aboriginal cultural heritage assessment.
Precinct 8 – Gorman Road	A number of Aboriginal sites have already been recorded within this precinct along the southern boundary and as part of the Goulburn STP survey in 2003 in the north east. Potential for Aboriginal objects to occur along and close to the Wollondilly River.	Areas planned for development within this Precinct will require a comprehensive Aboriginal cultural heritage assessment.
Precinct 9 – Mt Gray East	A large number of Aboriginal sites have already been recorded within this precinct as part of the Rocky Hill Powerline and previous subdivisions. Significant sites exist within the Rocky Hill area. Potential for Aboriginal objects to occur closer to the Mulwaree River.	Areas planned for development within this Precinct will require a comprehensive Aboriginal cultural heritage assessment.



**Planning,
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Environment**

Precinct name	Note	Recommendation
Precinct 10 – Mountain Ash	A number of Aboriginal sites have already been recorded within this precinct in the Rosemont Road area. Potential for Aboriginal objects to occur along and close to the watercourses.	Areas planned for development within this Precinct will require a comprehensive Aboriginal cultural heritage assessment.
Precinct 11 – Brisbane Grove	No Aboriginal sites have been recorded within this precinct to date. Sites have been recorded to the west and south. Potential for Aboriginal objects to occur along and close to the Mulwaree River.	Areas planned for development within this Precinct will require a comprehensive Aboriginal cultural heritage assessment.
Precinct 12 – Abattoir	A number of Aboriginal sites have already been recorded within this precinct. Potential for Aboriginal objects to occur along and close to the Mulwaree River and watercourses.	We note there is no change proposed for this precinct at this time. Any future plans for development within this Precinct will require a comprehensive Aboriginal cultural heritage assessment.
Precinct 13 – Garfield	A number of Aboriginal sites have already been recorded along the western and southern boundaries of this precinct.	Areas planned for development, such as vacant and undeveloped lands, will require a comprehensive Aboriginal cultural heritage assessment.
Precinct 14 – West Victoria Park	A number of Aboriginal sites have already been recorded along the northern boundary of this precinct. Potential for Aboriginal objects to occur along and close to the Wollondilly River.	Areas planned for development, such as vacant and undeveloped lands, will require a comprehensive Aboriginal cultural heritage assessment.
Precinct 15 – Mary's Mount	A large number of Aboriginal sites have already been recorded within this precinct as part of previous subdivisions. Potential for Aboriginal objects to occur along and close to the Wollondilly River.	Areas planned for development within this Precinct will require a comprehensive Aboriginal cultural heritage assessment.



Precinct name	Note	Recommendation
Precinct 16 – Bradfordville	<p>A number of Aboriginal sites have already been recorded within the north eastern area of this precinct.</p> <p>Potential for Aboriginal objects to occur along and close to the Wollondilly River.</p>	<p>Areas planned for development, especially undeveloped lands within this Precinct, will require a comprehensive Aboriginal cultural heritage assessment.</p>
Precinct 17 - Eastgrove	<p>A large number of Aboriginal sites have already been recorded within this precinct as part of the previous subdivisions and infrastructure projects.</p> <p>Significant sites exist within the Rocky Hill and Lansdowne Park areas.</p> <p>Potential for Aboriginal objects to occur closer to the Mulwaree River.</p>	<p>We note there is no change proposed for this precinct at this time.</p> <p>Any future plans for development within this Precinct will require a comprehensive Aboriginal cultural heritage assessment.</p>
Precinct 18 – Central Goulburn	<p>No Aboriginal sites have been recorded within this precinct to date.</p> <p>Potential for Aboriginal objects to occur closer along and to the Mulwaree River.</p>	<p>Potential for Aboriginal sites to occur in certain areas should be considered during any proposed development,</p>
Precinct 19 – Ifield	<p>No Aboriginal sites have been recorded within this precinct to date.</p> <p>Potential for Aboriginal objects to occur along and closer to the Wollondilly River.</p>	<p>Potential for Aboriginal sites to occur in certain areas should be considered during any proposed development,</p>
Precinct 20 – Correctional Centre	<p>A number of Aboriginal sites have already been recorded within this precinct along the powerline easement.</p> <p>Potential for Aboriginal objects to occur along and close to the Mulwaree and Wollondilly Rivers.</p>	<p>We note there is no change proposed for this precinct at this time.</p> <p>Any future plans for development within this Precinct will require a comprehensive Aboriginal cultural heritage assessment.</p>



Table 2: Precincts and opportunities for development – Aboriginal cultural heritage - Marulan

Precinct name	Note	Recommendation
Precinct 1 - Marulan Town Centre	<p>No Aboriginal sites have been recorded within this precinct to date.</p> <p>Large numbers of Aboriginal sites have been recorded in the surrounding area of Marulan as part of quarry activities and previous subdivisions.</p>	Areas planned for development within this Precinct will require a comprehensive Aboriginal cultural heritage assessment.
Precinct 2 – Marulan South	<p>A number of Aboriginal sites have already been recorded within this precinct along the western boundary and south eastern corner along Marulan reek.</p> <p>Large numbers of Aboriginal sites have been recorded to the south east as part of quarry activities.</p> <p>Potential for Aboriginal objects to occur along and close to the Marulan Creek and other watercourses.</p>	Areas planned for development within this Precinct will require a comprehensive Aboriginal cultural heritage assessment.
Precinct 3 – Marulan North	<p>No Aboriginal sites have been recorded within this precinct to date.</p> <p>Large numbers of Aboriginal sites have been recorded in the surrounding area of Marulan as part of quarry activities and previous subdivisions.</p>	Areas planned for development within this Precinct will require a comprehensive Aboriginal cultural heritage assessment.
Precinct 4 – Marulan West	<p>A large number of Aboriginal sites have already been recorded within this precinct as part of Lynwood Quarry</p>	<p>We note this Precinct is constrained by existing industry activities.</p> <p>Any future plans for development within this Precinct will require a comprehensive Aboriginal cultural heritage assessment.</p>



**Attachment 2 – Specific comments on the Goulburn Draft Urban and Fringe Housing Strategy relating to Biodiversity****South East and Tablelands Regional Plan**

The Regional Plan has mapped the high environmental value (HEV) lands and biodiversity corridors of the south east region.

Goal 1 - Direction 14, specifically, Direction 14.3 sets out that these areas require protection and the 'avoid, minimise, and offset' hierarchy applies to areas identified for new or more intensive development. The development must avoid areas of validated HEV, and any areas that cannot be avoided should be offset. This could be where council consider the use of Strategic Biodiversity Certification (see further information below on this).

I also note, Goal 4 - Direction 28, in particular Direction 28.2 and 28.3 which state;

28.2 Locate new rural residential areas:

- *close to existing urban settlements to maximise the efficient use of existing infrastructure and services, including roads, water, sewer and waste services, and social and community infrastructure;*
- *to avoid and minimise the potential for land use conflicts with productive, zoned agricultural land and natural resources; and*
- *to avoid areas of high environmental, cultural and heritage significance, important agricultural land and areas affected by natural hazards.*

This means that council will need to avoid any large lot residential development planned for validated HEV. It should be noted that areas of HEV must be validated prior to a planning proposal being approved.

The Regional Plan provides guidance on the validation rules for identification of high environmental value lands. The validation process should be carried out by a qualified ecologist in accordance with the guidance in the Regional Plan. See link <https://datasets.seed.nsw.gov.au/dataset/south-east-tablelands-high-environmental-value-hev>

Ministerial direction 2.1 - Environment Protection Zones

In addition, Ministerial direction 2.1 - Environment Protection Zones states;

(4) A planning proposal must include provisions that facilitate the protection and conservation of environmentally sensitive areas.

(5) A planning proposal that applies to land within an environment protection zone or land otherwise identified for environment protection purposes in a LEP must not reduce the environmental protection standards that apply to the land (including by modifying development standards that apply to the land). This requirement does not apply to a change to a development standard for minimum lot size for a dwelling in accordance with clause (5) of Direction 1.5 "Rural Lands".

Areas that are already zoned Environmental should not be rezoned to a different zone that offers less protection.

Any split zones that are identified in the Strategy such as Mount Gray East, should be rezoned in favour of preserving environmental zones.



Planning,
Industry &
Environment

Strategic Biodiversity Certification

With the new *Biodiversity Conservation Act 2016* there is now the opportunity for council to strategically plan areas of land that they want to develop in the future to provide certainty.

Council should consider whether this tool would be useful in any of the precincts, in particular Precinct 10 – Mountain Ash.

Biodiversity impacts of biodiversity certification proposals are assessed using the [Biodiversity Assessment Method \(BAM\)](#) - the same method that is used to assess impacts for single sites under the [Biodiversity Offsets Scheme](#). This ensures consistency of biodiversity outcomes within the planning system.

Standard biodiversity certification proposals must offset their biodiversity impacts by retiring biodiversity credits, as is required of individual developments under the Biodiversity Offsets Scheme. Offset obligations may also be met by making a payment into the Biodiversity Conservation Fund.

For strategic biodiversity certification, the following additional conservation measures may also be used to meet an offset obligation:

- reservation of land under the *National Parks and Wildlife Act 1974*
- adoption of development controls (or State infrastructure contributions) under the *Environmental Planning and Assessment Act 1979* that conserve or enhance the natural environment
- any other measure that the Minister for the Environment determines to be a conservation measure.

The availability of these additional measures ensures the strategic biodiversity certification process can respond to cumulative impacts and support enhanced conservation outcomes at a landscape or regional scale.

For proposals that may be considered 'strategic', the applicant or the Minister for Planning may make a declaration to this effect from the Minister for the Environment. The Minister can also decide to declare a proposal 'strategic'.



Table 1 - Precincts and opportunities for development – Biodiversity - Goulburn

Precinct name	Note	Recommendation
Precinct 1 - Run 'O' Waters (existing)	The northern part of the precinct is zoned RU6 transition, and the plan is to rezone it to R2 low density residential development.	No comment/agree with recommendations.
Precinct 2 – Run 'O' Waters (rural north)	<p>This area contains validated HEV White Box Yellow Box Blakely's Red Gum Woodland and should be avoided as per Direction 14 of the <i>South East and Tablelands Regional Plan 2036</i>.</p> <p>We note that the southern boundary adjoins Shannon Drive.</p>	<p>Rather than rezone to large lot residential which provides no protection to validated HEV Tablelands Grassy Box-gum woodland we recommend that this be rezoned to E3.</p> <p>We also recommend that there is a minimum lot size that will ensure that a dwelling can be placed without impacting the HEV.</p> <p>Validated HEV can not be rezoned for development in accordance with the Regional Plan.</p>
Precinct 3 – Baw Baw	We note that there is some HEV in the south east of the precinct however, this could be easily avoided in future development.	<p>Agree with recommendations.</p> <p>In addition, the HEV area could be protected by rezoning the south east area to an Environmental zone such as E3 – Environmental Management.</p> <p>Council could also consider using this land earlier than planned to take the pressure off other land that is less suitable.</p>
Precinct 4 – Sooley	<p>We note that this is a water supply area.</p> <p>There is Natural Temperate Grassland in the south east corner.</p> <p>As it is already zoned E3 we support this remaining and note Ministerial Direction 2.1 which provides for continued protection of this area.</p>	We agree that the E3 Environmental Management zone minimum lot size should remain at 100ha.



Precinct name	Note	Recommendation
Precinct 5 – Middle Arm West	<p>We note that there are a number of constraints to this site including the eastern gas pipeline and a high voltage transmission line.</p> <p>There is also White Box Yellow Box Blakely's Red Gum Woodland, an endangered ecological community in south of this precinct. The area is mapped as HEV and should be protected.</p>	<p>Avoid HEV.</p> <p>Agree that the recommendation of a detailed masterplan is necessary for long term development.</p> <p>Council could consider Strategic Biodiversity Certification for this precinct.</p>
Precinct 6 – Middle Arm East	<p>We note that the gas pipeline also runs through this precinct.</p> <p>There is White Box Yellow Box Blakely's Red Gum Woodland, an endangered ecological community in the north east corner of this precinct. The area is mapped as HEV and should be protected.</p>	<p>Agree that the recommendation of a detailed masterplan is necessary for long term development opportunities north of the gas pipeline and west of railway.</p> <p>Council could consider Strategic Biodiversity Certification for this precinct.</p>
Precinct 7 – Kenmore	<p>It is noted that this precinct contains significant amounts of environmental conservation, area subject to biodiversity offsets and environmental management land.</p> <p>The rezoning of land immediately adjoining the existing urban fringe to urban residential – some of it is mapped as HEV and as such should be protected is it HEV then we wouldn't support it in accordance with ministerial direction 2.1 (5)</p>	<p>Rezone land with HEV to Environmental zone E3.</p>
Precinct 8 – Gorman Road	<p>Proposal to rezone the RU6 land to Large Lot Residential zone.</p>	<p>Agree with recommendations.</p>
Precinct 9 – Mt Gray East	<p>The proposal to rezone validated HEV for development zones is not supported by the Regional Plan.</p> <p>Ministerial direction 2.1 doesn't support the removal of environmental zoning to address the split zone issue.</p>	<p>The split zoning anomaly created by the Hume Highway should be resolved in favour of the existing environmental zone.</p> <p>Validated HEV should not be rezoned to allow development.</p>



Precinct name	Note	Recommendation
Precinct 10 – Mountain Ash	Amendment no 2 to the LEP determined that MLS of 20 ha was appropriate due to the presence of validated HEV on the site. We don't support the reduction of lot sizes in this precinct.	<p>Council should consider rezoning land to the west of this precinct currently zoned primary production to E3 to protect the HEV.</p> <p>Rather than rezone to large lot residential which provides no protection to validated HEV box gum woodland this should be rezoned to E3. We also recommend the minimum lot size ensure that a dwelling can be placed without impacting the HEV.</p> <p>Council could consider the Biodiversity certification process under the <i>Biodiversity Conservation Act 2016</i>.</p>
Precinct 11 – Brisbane Grove	<p>The precinct has a significant portion of land that is potentially flood affected, between Brisbane Grove Road and the Hume Highway; additional flood prone land may exist beyond current Flood Study.</p> <p>Direction 16, Action 16.1 of the Regional Plan states that development, including new urban release areas, should be located away from areas of known flooding hazards to reduce the community's exposure to natural hazards.</p>	<p>Council should avoid creating dwelling entitlements in the probable maximum flood (PMF) range.</p> <p>Council should consider addressing the risks in a Floodplain Risk Management Study.</p>
Precinct 12 – Abattoir	No change proposed.	Agree with recommendation of no change.

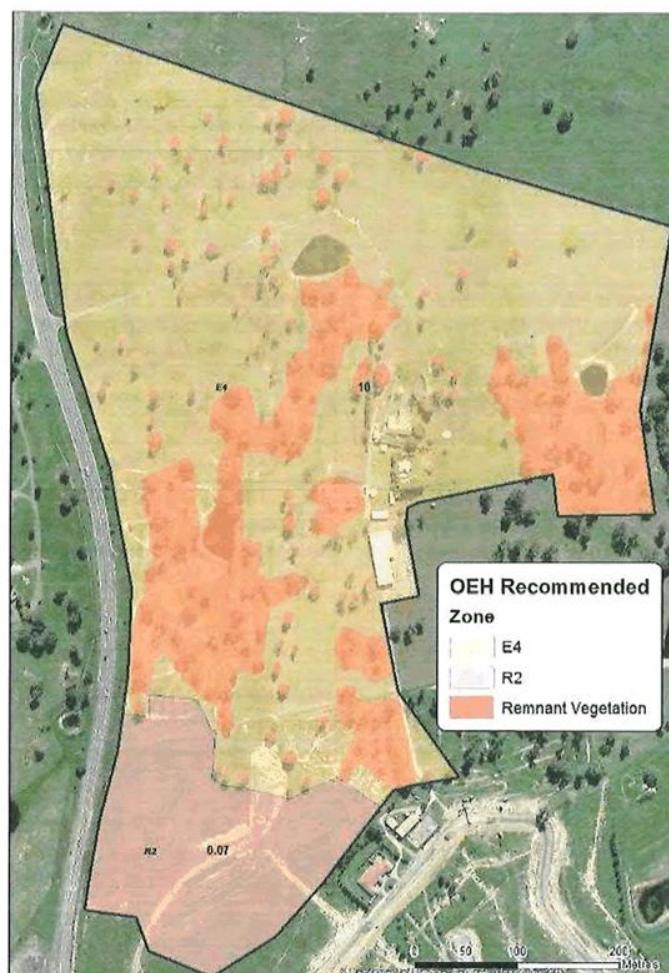


Precinct name	Note	Recommendation
Precinct 13 – Garfield	<p>There is validated HEV within this precinct which includes White Box Yellow Box Blakely's Red Gum Woodland.</p> <p>These areas should be protected in accordance with the Regional Plan and Ministerial Direction 2.1.</p>	<p>We agree with recommendations.</p> <p>In addition, we continue to support the implementation of the <i>South Goulburn Endangered/Threatened Species Management Plan 2004</i> adopted by council on 16 November 2004 Minute No. 04/521.</p>
Precinct 14 – West Victoria Park	<p>There is validated HEV within this precinct which is White Box Yellow Box Blakely's Red Gum Woodland.</p> <p>These areas should be protected in accordance with the Regional Plan and Ministerial Direction 2.1.</p>	<p>Agree with recommendation to consider rezoning the R5 to accommodate a smaller minimum lot size and more efficient use of water and sewer infrastructure.</p> <p>However we do not support the rezoning of HEV land to anything other than E3.</p>
Precinct 15 – Mary's Mount	<p>We note that the precinct plan has excluded the White Box Yellow Box Blakely's Red Gum Woodland located directly north of this precinct.</p> <p>See Figure 1</p>	<p>Agree with recommendations to encourage infill development of residentially zoned land. But areas of Box Gum woodland should be protected.</p>
Precinct 16 – Bradfordville	<p>We note that there is Natural Temperate Grassland in the north west corner of the precinct.</p>	<p>Agree with recommendations to encourage appropriate infill development of residentially zoned land.</p> <p>However, the Environmental Zone E3 should be protected from further urban infill.</p>
Precinct 17 - Eastgrove		Agree with recommendations
Precinct 18 – Central Goulburn		Agree with recommendations
Precinct 19 – Ifield		Agree with recommendations
Precinct 20 – Correctional Centre		Agree with recommendations


Precincts and opportunities for development – Biodiversity - Marulan

Precinct name	Note	Recommendation
Precinct 1 - Marulan Town Centre	There is HEV land, which contains White Box-Yellow Box-Blakely's Red Gum Grassy Woodland and Derived Native Grassland within this precinct.	Agree with recommendations. HEV land should be protected by any rezoning planning proposal. Consideration should be given to zoning HEV land to E3.
Precinct 2 – Marulan South	There is HEV land, which contains White Box-Yellow Box-Blakely's Red Gum Grassy Woodland and Derived Native Grassland within this precinct.	Any land with HEV should be zoned E3 rather than large lot residential development.
Precinct 3 – Marulan North	There is HEV land, which contains White Box-Yellow Box-Blakely's Red Gum Grassy Woodland and Derived Native Grassland within this precinct.	HEV land should be protected by any rezoning planning proposal. Consideration should be given to zoning HEV land to E3.
Precinct 4 – Marulan West	No housing proposed here due to quarry expansion in the future.	Agree with recommendations.

Figure 1 - Marys Mount remnant vegetation directly north of Precinct 15





The General Manager
Goulburn Mulwaree Council
Locked Bag 22
Goulburn NSW 2580

Our ref: DOC19/1020472

Emailed: Submissions@goulburn.nsw.gov.au

9 January 2020

Dear General Manager

Subject: Draft Urban and Fringe Housing Strategy exhibition

Thank you for the opportunity to provide comment on the public exhibition of the Draft Urban and Fringe Housing Strategy exhibition. This is a response from the NSW Department of Planning, Industry & Environment – Division of Resources & Geoscience.

The Division has reviewed the Strategy and provides the following comments in relation to Ministerial Planning Direction 1.3 – Mining, Petroleum Production and Extractive Industries, and the Goulburn Mulwaree Mineral Resource Audit 2015.

Goulburn housing precincts:

The Strategy identifies the Sooley and Middle Arm West precincts are coincident with the Kingsgate Limestone Potential Resource Area (PRA). While the Division is not aware of current extraction operations or plans for development, residential zoning would prohibit development of limestone resources within that part of the Kingsgate PRA. The Division acknowledges the Strategy has avoided the Kingsgate PRA around the Baw Baw and Run 'O' Waters precincts, and that the majority of the PRA remains zoned for rural land uses and available for potential limestone extraction.

The Division has no issues with the Goulburn housing precincts.

Marulan housing precincts:

The Strategy identifies land around Marulan West as being highly constrained by Lynwood Quarry. The Division supports the recommendation that there is no additional development capacity in West Marulan due to significant constraints including incompatible land uses, and that housing in this precinct would sterilise potential resource areas or quarry expansion.

The Division acknowledges the potential for land use separation between the Marulan North URA and the Gunlake Quarry haul route as well as a recommendation to limit residential use.

The Division has no concerns with the Marulan South area (north of the main Southern Railway), however further residential development within area M-2 south of the Main Southern Railway in the vicinity of the Peppertree Quarry private rail line (Consolidated Mining Lease16) would be of concern to the Division.



Queries regarding the above information, should be directed to the Division of Resources & Geoscience - Land Use team at landuse.minerals@geoscience.nsw.gov.au.

Yours sincerely,

A handwritten signature in black ink, appearing to be 'A. Helman'.

Andrew Helman

Senior Geoscientist, Land Use Assessment

Geological Survey of NSW, Division of Resources & Geoscience



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18 December 2019

The General Manager
Goulburn Mulwaree Council
Locked Bag 22
GOULBURN NSW 2580

Contact: *Alison Kniha*
Telephone: *02 9865 2505*
Our ref: *D2019/147541*

Attention: Megan Trotter

Dear Sir/ Madam

RE: Revised Draft Urban and Fringe Housing Strategy: Goulburn and Marulan

I refer to Council's email dated 18 October 2019 seeking comments from WaterNSW on the Draft Urban and Fringe Housing Strategy (dated 18 September 2019).

WaterNSW provided comments on the previous version of the Strategy on 1 March 2019 (our ref: D2019/21735), including an assessment of the then 39 'deferred areas'. Whereas the earlier Strategy only focused on delivery of land for urban housing supply, the new Strategy identifies opportunity areas for future urban residential land, future urban release, and large lot residential land, integrating a number of previously 'deferred areas' into the overall Strategy. The overall strategy is now more responsive to site constraints.

Notwithstanding, WaterNSW has concerns relating to the inclusion and location of Precincts proposed for Large Lot Residential development, which present significant challenges for managing the water quality risk as they are unsewered. While we are supportive of Council's approach of applying a constraints analysis for each Precinct and adopting a 2 hectare (ha) minimum lot size for the lots, the constraints analysis does not appear to take into account the results of the Strategic Land and Water Capability Assessments (SLWCAs) and the buffer distances required for effluent management areas (EMAs).

South Marulan appears to be particularly constrained with much of the area being generally unsuited for unsewered residential development. Further consideration of the SLWCAs and EMA buffer distances may help refine Precinct boundaries, improve lot yield estimations, and reduce water quality risks arising from later new development. It will also help ensure that later development will be able to achieve a neutral or beneficial effect (NorBE) on water quality as required under State Environmental Planning Policy (Sydney Drinking Water Catchment) 2011.

Please note that future planning proposals for changes in zoning and related local environmental plan controls will need to be referred to WaterNSW for consideration in accordance with Section 9.1 Direction 5.2.

More detailed comments on the revised Draft Strategy are provided in Attachment 1. If you have any questions regarding the issues raised in this letter, please contact Stuart Little at stuart.little@waternsw.com.au.

Yours sincerely

A handwritten signature in black ink, appearing to read "Preshaw".

CLAY PRESRAW
Manager Catchment Protection

Attachment 1

Overview & Approach

The Draft Strategy identifies opportunity areas (Precincts) to supply around 3,500 dwellings in Goulburn and Marulan over the coming 18 years, with most of the supply in Goulburn. The Strategy distinguishes between opportunity areas (Precincts) for:

- Serviced Urban Residential Land (serviced with reticulated sewer, and a minimum lot size (MLS) of 700m²)
- Urban Release Area (also known as 'future urban land', assumed to be serviced by water and sewer)
- Large Lot Residential Land (unsewered rural residential housing with a MLS of 2ha).

Site Constraints

The Draft Strategy relies on a Site Constraints analysis at both a broad and Precinct scale to generate the likely lot yields.

Broad Scale Analysis

The analysis incorporates consideration of biodiversity, infrastructure, and land use constraints. It generally includes subset of the constraints used at the Precinct scale, with constraints such as erosion risk, heritage and bushfire-prone land being confined to the Precinct-scale analysis. Flooding risk and 40m riparian buffer requirements for 4th order streams are considered as broad scale site constraints (Figures A and B).

The analysis is intended to 'sieve out' that land which presents a challenge to development and that which is least constrained. However, as the Precinct boundaries are not overlain with the constraints analysis, it is difficult to determine how the Strategy responds to the site constraints at this broad scale. To this end, Figures A and B would benefit by overlaying the boundaries of the Precincts to show how their location and shape respond to the constraints identified. The constraints analysis would also benefit by including results of the Strategic Land and Water SLWCAs and, for large lot residential development, buffer distances required for EMAs (see below). Such an approach would help substantiate how the Strategy has responded to site constraints including risks to water quality.

Precinct Summaries Constraints Analysis

From a water quality perspective, the Precinct-based site constraints analysis is more refined than the broad constraints analysis in that it includes erosion risk, flooding risk and riparian buffers at more refined scales. However, the analysis does not take due account of outcomes of the SLWCAs and buffer distances required for EMAs.

Effluent Management Areas (EMAs)

Within the Sydney Drinking Water Catchment, EMAs are required to be sited 100m from permanent or intermittent watercourses and from the full supply level for all water supply reservoirs. They are also required to be located at least 40m from farms dams and drainage features.¹ The Strategy recognises the 100m buffer requirement noting that it poses a constraint to large lot residential (un-serviced lots) development in some fringe precincts, particularly South Marulan, Brisbane Grove and Mountain Ash (p.64). However, none of the individual Precinct summary maps factor this 100m buffer distance into the constraints analysis and only the Marulan South Precinct summary mentions this 100m EMA buffer requirement.

WaterNSW recommends that the Precinct Summaries analysis for the Large Lot Residential Precincts (Gorman Road, Mt Grey East, Run'O'Waters, Brisbane Grove, Mountain Ash and South

¹ These distances are reflected in key WaterNSW development control publications including WaterNSW (2018) *Developments In The Sydney Drinking Water Catchment – Water Quality Information Requirements* and WaterNSW (2015) *Neutral or Beneficial Effect on Water Quality Assessment Guideline*.

Marulan) be reviewed to include consideration of the EMA buffer distances in the respective Precinct constraints analyses as projected lot yields may be over-estimated. Such a review may also help identify which land is heavily constrained by the presence and density of watercourses and drainage features and therefore where unsewered development may be highly constrained. The revised analysis would also help ensure that water quality is protected and that a NorBE can be achieved in future subdivisions arising in these areas.

Strategic Land and Water Capability Assessments (SLWCAs)

Outputs from the SLWCAs are provided for Residential Sewered land and Unsewered Residential lots 4,000m² to 2ha for both Goulburn and Marulan (Appendix D). However, these outcomes are not discussed in the body of the Strategy. It is unclear whether and how the SLWCAs have informed the broad site constraints analysis (Figures A and B) or those conducted for individual Precincts (Section 3).

The Strategy would benefit by more clearly articulating how it responds to water quality risks as informed by the SLWCA results. To this end, the Strategy should examine the location and boundaries of the Opportunity Precincts (Figures C and D) against the water quality risks as informed by the SLWCA results, and provide some explanatory text. Ideally this would be supported by maps that overlay the Precinct polygons for:

- a) the 'Serviced Urban Residential' and 'Urban Release Area Long Term' for Goulburn (Figure C) and Marulan (Figure D) with the SLWCAs for Residential Sewered land for Goulburn and Marulan ((Figures 4 and Figure 5 of Appendix D, respectively), and
- b) 'Large Lot Residential' areas for Goulburn (Figure C) and Marulan (Figure D) with the SLWCAs for Unsewered lots 4,000m² to 2ha for Goulburn and Marulan (Figures 6 and 7 of Appendix D, respectively).

The Strategy would also benefit by mentioning the results of the SLWCAs in the individual Precinct boundaries, particularly the outcomes of the SLWCA for Unsewered Residential lots 4,000m² to 2ha in relation to the Precincts identified for Large Lot Residential development.

Sewer and Related Services

All Precinct summaries would benefit by clearly stating whether the opportunity areas are, or proposed to be, connected to services such as sewer and water.

Opportunities for Development

The opportunity growth areas are shown in Figures C and D, with relevant Tables on pages xiv and xv summarising the intended outcomes and yields for the Precincts. Goulburn is identified as generally having 11 opportunity Precincts (Figure C):

- four Urban Residential Land areas
- two Urban Release Areas
- four Large Lot Residential Land areas, and
- one area comprising mostly Serviced Urban Residential land but with a small component proposed for Large Lot Residential use.

Marulan has three opportunity areas: one Urban Residential Land, one Urban Release, and one Large Lot Residential area.

Goulburn

Large Lot Dwellings

Large Lot dwellings are proposed in four Precincts (Gorman Road, Mt Grey East, Mountain Ash and Brisbane Grove) in Goulburn with one area, Run'O'Waters, including a limited number of unserviced adjoining Large Lot Residential Serviced residential development.

In email correspondence of 4 December 2019, Council confirmed the Gorman Road large lot residential opportunity areas are largely occurring on the western flank of Gorman Road on land that is already cleared. WaterNSW is supportive of this approach as it avoids the vegetated areas

that the SLWCA (for Unsewered Residential Development lots 4,000m² to 2ha) identifies as a posing a High Risk to water quality. Some areas of Extreme Risk occur along the drainage features, and future lot configurations would need to be sensitive to the constraints presented by these features.

WaterNSW is supportive of the Mount Gray East (seemingly incorporating former deferred Site 7) provided the land proposed for development is that land which is already cleared. The cleared land in this area generally has a Low to Extreme Risk to water quality (for Unsewered Residential Development Lots 4,000m² to 2ha), with most Moderate Risk and the Extreme Risk areas being confined to drainage features. WaterNSW is supportive of avoiding the steep areas of vegetated land immediately east of this site which are generally High to Extreme Risk and therefore poorly suited to rural residential development.

The Brisbane Grove and Mountain Ash areas are generally associated with a Low to Extreme Risk to water quality as based on the SLWCA for Unsewered Residential Development Lots 4,000m² to 2ha. Areas of Extreme Risk are generally associated with drainage features. There should be sufficient flexibility in this landscape to accommodate large lot dwellings. However, a number of drainage features in this area include 3rd and 4th order streams with large catchments. Buffer distances for EMAs may influence the projected lot yields in this Precinct, particularly for those areas between Mountain Ash Road and Windellema Road. Lot configurations will need to be sensitive to watercourse constraints. The Brisbane Grove area is generally less dissected by drainage features than Mountain Ash and may have greater propensity to meet the lot yields projected.

The Run'O'Waters precinct includes an estimated 11 Large Lot dwellings as well as 1,693 residential dwellings. Relevant to the Large Lot dwellings, the SLWCA for Unsewered Residential Development Lots 4,000m² to 2ha reveals that the land generally carries a Low to Moderate water quality risk, with an Extreme risk being associated with waterways. At face value, there appears to be sufficient capacity within this area to sustain 11 Large Lot dwellings as proposed. The position of EMAs with respect to nearby serviced residential development will need to be considered in any Planning Proposal and subdivision application for this area.

Marulan

Marulan is highly constrained in terms of being able to supply unsewered Large Lot Residential development. In previous correspondence, WaterNSW identified concerns with regard to unsewered development risks for urban areas to the north of Marulan, noting that the risk to water quality is predominantly High to Extreme in that area (based on the SLWCA for Unsewered Residential, 4,000m² – 2ha lots; Figure 7 Appendix D). The revised Strategy (page xv) now advocates a possible staged approach to deliver the Serviced Urban Residential development to Marulan North.

WaterNSW does not support the staged approach, and believes that the proposed Marulan North Precinct should be fully serviced with reticulated sewerage prior to residential development and occupation. For sewered development, the water quality for these general areas (combined) is Low to High with a Moderate Risk predominating except in the south-east of the Precinct which generally has a Low Risk to water quality. WaterNSW is therefore supportive of those aspects of the Strategy that seek to reduce water quality risks by ensuring that new urban development is sewered in these areas.

The Strategy also proposes to accommodate Large Lot Residential (unsewered) development in an area referred to as Marulan South (Figure D). It appears this area is being put forward in place of former Deferred Area 16 which lies south of the railway line. Both former Deferred Area 16 and the current Marulan South Opportunity Area have significant water quality risk constraints. Based on the results of the SLWCA for Residential Unsewered Lots (4,000m² to 2ha), both areas are characterised by Moderate to Extreme Risks to water quality, with most of the land being dominated by an Extreme risk. The Marulan South area contains a number of 1st and 2nd order drainage features and, as raised earlier, the constraints analysis, does not take into account the

buffer distances for EMAs. The land may be more constrained than anticipated by the Strategy. WaterNSW is generally not supportive of unsewered development occurring in this area.

As an alternative, based on results of the SLWCA for Residential Unsewered Lots (4,000m² to 2ha), areas south-west of Marulan between the Main Southern Railway and Hume Highway have land areas that vary from Low to Extreme Risk to water quality, with more areas of Low Risk potentially available for development. WaterNSW would welcome the opportunity to discuss with Council whether this area might be more suitable in providing a limited supply of Large Lot Residential housing.

Run-O-Waters

The Strategy generally adopts a 2ha MLS for Large Lot residential development, although the Tables on page xv identify the possibility of smaller MLS 2,000-4,000m² being supplied to the Large Lot Residential land at Run'O'Waters Precinct only if water and sewer services become available (see page xv). WaterNSW supports this approach.

Large Lot Residential Demand and Supply

The draft Strategy (Table 17) indicates that during the past decade there has been 820 approvals for dwellings, however there is no breakdown of dwelling approvals between serviced residential allotments and unserviced rural-residential allotments on larger blocks. This makes it difficult to understand the demand for unserviced rural residential type dwellings. The Strategy seems to use zoning as a surrogate for rural residential development, noting, that rural residential development is typically located in land zoned R5 Large Lot Residential, RU6 Transition and E4 Environmental Living and with MLSs ranging from 2,000m² to 10ha depending on zoning and MLS requirements (pages 55-56). The Strategy identifies that 290 lots have been created in Goulburn over the past decade while, over this same period, approvals have been granted for 200 dwellings. It concludes that there is around 4.5 years supply of large lots for Goulburn.

It is not clear whether the figures of 290 and 200 have been derived from an analysis of R5 zoned land only (as stated on page 60), or derived from an analysis of RU6 and E4 zoned land (as implied on page 56). If the former, then the analysis would benefit by including lot demand and supply information for RU6 and E4 zoned land. It may well be that there is a greater available supply of rural residential land than suggested, thereby reducing the immediate need for further rezoning and changes to MLSs to facilitate more unsewered development.

Section 9.1 Direction 5.2 Sydney Drinking Water Catchment

The Draft Strategy overviews the key provisions and principles of the Section 9.1 Direction 5.2 Sydney Drinking Water Catchment in Appendix A, recognising its objective to protect water quality and that it applies to planning proposals within the SDWC. Inclusions of these provisions are supported. This section would also benefit by cross-referencing the results of the SLWCAs.

State Environmental Planning Policy (Sydney Drinking Water Catchment) 2011.

The Draft Strategy includes a brief summary about the role of the SDWC SEPP on pages 5-6 that would benefit by explicitly stating that the SEPP actually requires new development to have a NorBE on water quality. A similar statement could also be made in the last paragraph about the SEPP as contained in Appendix A.

Sydney Drinking Water Catchment – Definition

The draft Strategy (page 64) includes information about the SDWC, drawing from key requirements of the SDWC SEPP and Direction 5.2, as well as addressing key constraints to residential land use from a water quality perspective. These provisions are supported. The Strategy may benefit by including a link to a map of the Sydney Drinking Water Catchment as provided here: https://www.watarnsw.com.au/_data/assets/pdf_file/0004/55975/Fact-sheet-and-map-Sydney-drinking-water-catchments.pdf.

Section 5 – Actions

Strategy I1 (page 126) includes three actions to assist water quality and water management. WaterNSW is supportive of the three actions but makes the following suggestions:

- Action I1-1 requires the consideration of the impact of urban development on the SDWC in the Planning Proposal. This Action could be expanded to read ‘... consider the impact of urban development on water quality in the Sydney Drinking Water Catchment ...’.
- The action concerning the inclusion of WSUD in Development Control Plans (DCPs) should be numbered I1-3.

Other Issues

- The maps presented in Figures C and 24 of the Strategy would benefit by clearer positioning the call out text so that it does not truncate Precinct boundaries.
- The Tables on page xv identify 30 Large Lot Dwellings for Gorman Road whereas Figure C identifies 24 lots.
- The paragraph at the top of page x regarding large lot development and the RU6 land at Marulan should be clarified in terms of the statements made and the arguments presented. The second sentence states that this ‘does mean that the land is suitable for development. Is the word ‘not’ missing from this sentence? It is also unclear how the argument to protect the said areas from fragmentation (urban or environmental) accords with the need for 10ha allotments, and whether the fragmentation issue raised is in relation to fragmentation from urban or rural environments.

Laterals
PLANNING

Goulburn Mulwaree Council
Date Received: 12.12.19
Signature: [Signature] @ 12pm

Our Ref.: 1928

SCANNED

The General Manager
Goulburn Mulwaree Council
Locked Bag 22
GOULBURN NSW 2580

Attention: Kate Wooll

Re: **Goulburn Mulwaree Draft Urban and Fringe Housing Strategy
Lot 1 DP 1255740, "Goulburn & District Race Club", 204 Taralga Road,
Goulburn**

Dear Kate,

I refer to the Goulburn Mulwaree Draft Urban and Fringe Housing Strategy (Strategy) currently on public exhibition and act under the instruction of the owner of the above land to make this submission to Council in support for the inclusion of the subject land to be rezoned R5 Large Lot Residential Zone and to have a minimum lot size of 2000sqm for rural residential development.

The land is currently zoned RE2 Public Recreation and has no minimum lot size. The land is owned by the Goulburn District Race Club and forms part of the Goulburn Racecourse.

As part of this submission the Race club also requests the inclusion of the portion of land in Schedule 1 - Additional Permitted Uses of the Goulburn Mulwaree LEP to allow the use of the land for Animal Boarding and Training Facilities which are currently prohibited development within and R5 Large Lot Residential Zone. This would allow the establishment of stables on the allotments and encourage more trainers to take up residence close to the track.

The Goulburn and District Race Club employ 80 people, most as casual staff. There are 40 Trainers who use the track to train their horses 6 days a week and they employ approximately 100 additional staff members. The racing industry in Goulburn also use mainly local businesses for their supplies, such as local stockfeed stores, farriers, vets etc and the on race days, especially larger race days such as the Goulburn Cup or Ladies Day the racing industry would also generate work for local hairdressers, makeup artists, photographers, milliners, clothing and shoe stores etc as well as motels, restaurants and other licensed premises after racing has finished.

1

The development area is adjacent to Precincts 6 – Middle Arm East and 7 – Kenmore and at the urban interface adjacent to existing R5 Large Lot Residential zoned land and the Police Driver Training Centre which is zoned SP2 – Infrastructure.

Studies to support this submission have been undertaken, these studies are:

- Flood Study – Completed by GRC (Dated October 2019)
- Flora and Fauna Assessment – Completed by Umwelt (Dated November 2019)
- Traffic Assessment – Completed by Solution 1 Traffic Engineers (Dated November 2019)

Consultation was also undertaken with Goulburn Mulwaree Council as prior to the housing strategy being placed back on public exhibition the race club were considering a Site Specific Planning Proposal and with APA who has direct management and operational control over the High Pressure Gas Transmission Lines that run through the property (a copy of the advice from APA is attached).

The strategy states that there is an objective to “provide a diversity of choice in residential land and dwelling types in a range of appropriate locations responsive to the demographic needs of the Goulburn Mulwaree LGA.” The proposed re-zoning and subsequent subdivision of the land will allow for residential diversity and dwelling types in locations responsive to the demographic needs of the LGA.

The Strategy provides additional criteria for R5 Large Lot Residential Development, that is in addition to addressing ministerial directions and the guideline to Preparing Planning Proposals, these criteria are addressed below:

- *The development is identified in the Strategy as an opportunity area for Large Lot Residential Development:* Comment: The development hasn’t been identified in the Strategy, this submission is asking that the land be identified and considered in the strategy.
- *The development will not undermine future residential land opportunities. It should be located on land that is not, or unlikely to be suitable for general residential land at some point in the future.* Comment: The development will not undermine future residential land opportunities; the land is not likely to be suitable for general residential zoning. The Goulburn and District Race Club wish to have the land rezoned to encourage more horse trainers to move their operations to the district, build a dwelling and either use the stable facilities available at the adjoining track or build a small set of stables on their lots, similar to facilities that have set up on the R5 zoned land to the south of the racetrack (a subdivision that the race club undertook some years ago for the same purpose).
- *The development can be managed to avoid land use conflict. Large Lot development should have regard to the surrounding agricultural land use and must provide a buffer to agricultural land.* Comment: The surrounding land uses are the Police Driver Training Centre, the Goulburn Racetrack, The Goulburn Waste Water Treatment Plan

Farm, and the former Kenmore Hospital. The former Kenmore Hospital and wastewater treatment farm have been identified as a precinct for future residential growth (Precinct 7).

Potential Conflicts arise from:

- NSW Police Driver Training Centre: The Police Driver Training Centre is approximately 280m from the boundary of the proposed lot, the driver training track is approximately 184m further inside the boundary of the allotment (464m total). The racetrack and adjoining residential development have operated along side the Police Driver Training Centre since the tracks construction and there have been no known issues resulting from the outdoor uses on the Driver Training Centre. Recent media attention regarding the Centre and Racetrack has been around the Police and an outdoor shooting range which operates at the facility and the increase in operational hours of that shooting range. This matter has been resolved and is not expected to impact on the rezoning proposal.
- The development lot is also constrained by the Highland Source Pipeline, and two High Pressure Gas pipelines (Moomba-Sydney and Moomba-Wilton), consultation has been held with APA who have made comment in the attached letter.

The development is within the Measurement Length (ML) of the Pipeline, which in this case is 675m (either side). Certain Development types are discouraged from construction within the ML, these land uses are considered sensitive and include:

- | | |
|------------------------|-----------------------------|
| • Child Care Centres | • Detention facility |
| • Place of Worship | • Residential Care facility |
| • Educational facility | • Retirement facility |
| • Function Facility | • Service Station |
| • Health Care Services | • Shop |
| • Hospital | • Shopping Centre |
| • Hotel | • Theatre |

Most of the above land uses are prohibited within the proposed zone. Residential development is not a sensitive land use and the other land use that the Race club are asking be included (Animal Boarding and Training Establishment) is also not considered a sensitive use, therefore there is no basis to not consider this proposal due to the pipeline location or easements. At this stage in the development process APA have no objections to the proposal, asking to be included in any future consultation on the proposal.

It should be noted that these conflicts also effect to a certain extent the identified Precincts of Kenmore and Middle Arm East.

- *The site is unconstrained by flooding, as it is above the flood planning level of the 1 in 100 ARI. The area is not affected by flooding and has unconstrained flood free access out of the property and/or locality.* Comment: The site is constrained by flooding which has been mapped in the attached Flood Study completed by GRC. There is sufficient area within the site that is unconstrained by flooding to enable the subdivision of up to 15 allotments.
- *The lots can be connected to the existing road network by sealed road access. The area can be connected to the existing sealed road network by sealed road access and is fully serviced by a sealed road.* Comment: The lots can be connected to Taralga Road (Main Road 256) by a sealed road and fully serviced by a sealed road. The traffic study conducted by Solution 1 Traffic Engineers has shown that the proposed rezoning and subsequent subdivision will generate minimal additional traffic impact to Taralga Road.
- *The resulting residential development will not adversely impact on the groundwater system. Any development, and in particular un-serviced development, needs to demonstrate that it will not adversely impact on the groundwater system.* Comment:

A draft MUSIC Model and stormwater assessment has been undertaken, the report is being finalised and wasn't available for comment, however from initial assessment the development as drafted does not adversely impact on the ground water system.

A copy of the report will be provided prior to the development of the planning proposal for the area.
- *The need for the additional lots can be justified in terms of supply and demand.* Comment: The Race Club has consulted with local real estate agents who strongly believe that the subdivision will have a quick take up, especially by persons who have connections with Horse Racing Industry.
- *The site be managed to reduce bushfire hazard and provides for evacuation in accordance with the NSW Planning for Bushfire Protection Guideline.* Comment: The land is considered Bushfire Prone Land under the Goulburn Mulwaree Bushfire Map. Bushfire Risk has not been assessed as part of this submission as the final use of the land has not been determined.
- *The development should avoid class I-III agricultural land and avoid Important Agricultural Land (subject to mapping being completed for the LGA).* Comment: The development is not on Class I-III agricultural land.

- *The development will have access to a sustainable water supply. The proposed lot must demonstrate the provision of a sustainable water supply. A sustainable water supply can be achieved by various means including the provision of reticulated water, roof water catchment or accessing water from a river, lake or aquifer in accordance with the Water Management Act 2000. Department of Primary Industries – Water 'How much water do I need for my rural property' provides one methodology to calculate a required supply.* Comment:
The development can connect to all town services. Include reticulated water.

In respect to the Local housing strategy objectives, this proposed large lot residential development will:

- provide residentially zoned land suitable for timely development to meet current and future needs of the Goulburn Mulwaree LGA.
- provide a diversity of choice in residential land and dwelling types in a range of appropriate locations responsive to the demographic needs of the Goulburn Mulwaree LGA.
- provide future development which will not create unrequired demand for significant new infrastructure.
- provide future development which will avoid or minimise conflict between land uses.
- provide for development that will complement and reinforce existing and future settlement structure, character and uses and allow for the creation of legible and integrated growth
- ensure sufficient employment land is retained through redevelopment or provided for to allow Goulburn to support commercial enterprise, service provision and employment as the population increases, and reduce escape expenditure.
- avoid areas of environmental significance, significant natural and/or economic resources, potential hazards, high landscape or cultural heritage value, or potential increased risk associated with impacts of climate change.
- allow a transition land use and subdivision pattern which protect highly productive agricultural landscape and areas of significant biodiversity.

In respect to the objectives of the R5 Large Lot Residential Zone, the following comments are provided:

- *To provide residential housing in a rural setting while preserving environmentally sensitive locations and scenic quality.*
Comment: The proposed development will provide residential housing in a rural setting while preserving environmentally sensitive locations and scenic quality.
- *To ensure that large residential lots do not hinder the proper and orderly development of urban areas in the future.*
Comment: The proposed development will not hinder the proper and orderly future development of the urban area.

- *To ensure that development in the area does not unreasonably increase the demand for public services or public facilities.*
Comment: The proposed development will not unreasonably increase the demand for public services or public facilities, the development is capable of being fully serviced by water, sewer, stormwater, electricity and gas with no unreasonable cost to the public.
- *To minimise conflict between land uses within this zone and land uses within adjoining zones.*
Comment: Any conflict between land uses can be minimised with a development specific Development Control Plan that sets out acoustic provisions for future housing, landscape requirements, provisions for additional land uses on each lot, setbacks from adjoining land uses and roads.
- *To facilitate and promote an increased range of residential opportunities by providing for low intensity residential development compatible with the rural characteristics of the locality.*
Comment: The proposed development will enable an increased range of low intensity residential opportunities that are compatible with the surrounding rural characteristics.
- *To encourage subdivision of land that is consistent with the constraints and opportunities of the land.*
Comment: The proposed subdivision layout is consistent with the constraints and opportunities of the land.

The following information is also included:

▪ Site aerial photograph	Page 8
▪ Current zoning plan	Page 9
▪ Current lot size map	Page 10
▪ Terrestrial Biodiversity Map	Page 11
▪ Flood Planning Map	Page 12
▪ Topographic Map	Page 13
▪ Heritage Map	Page 14
▪ Bushfire Map	Page 15
▪ Proposed subdivision pattern	Page 16

It is therefore submitted that the rezoning and reduction of the minimum lot size for the subject land is consistent with Council's Housing Strategy and:

- The area proposed for subdivision is identified as suitable for development with sufficient area to accommodate a low intensity dwelling and associated infrastructure which may include horse stables or similar if Council supports the addition of the development lot in Schedule 1 of the LEP.
- There is a market demand for the provision of land for 2000sqm lots which our clients can provide in an orderly manner.

- The subdivision of the land is similar to the surrounding R5 zoned areas to the Southwest of the proposed development.
- There is no significant vegetation on the allotment.

If you require any further information or clarification please do not hesitate to contact me at narlisa@laterals.com.au or on 0412195931.

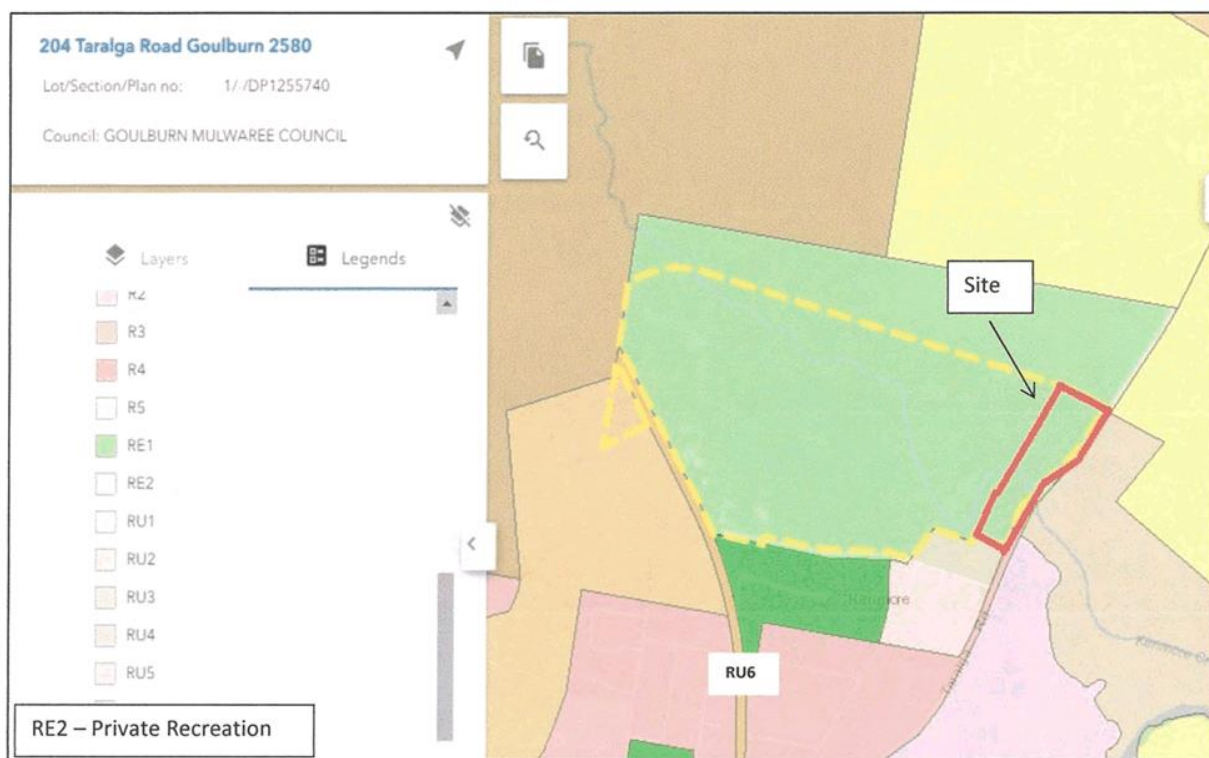
Yours faithfully,



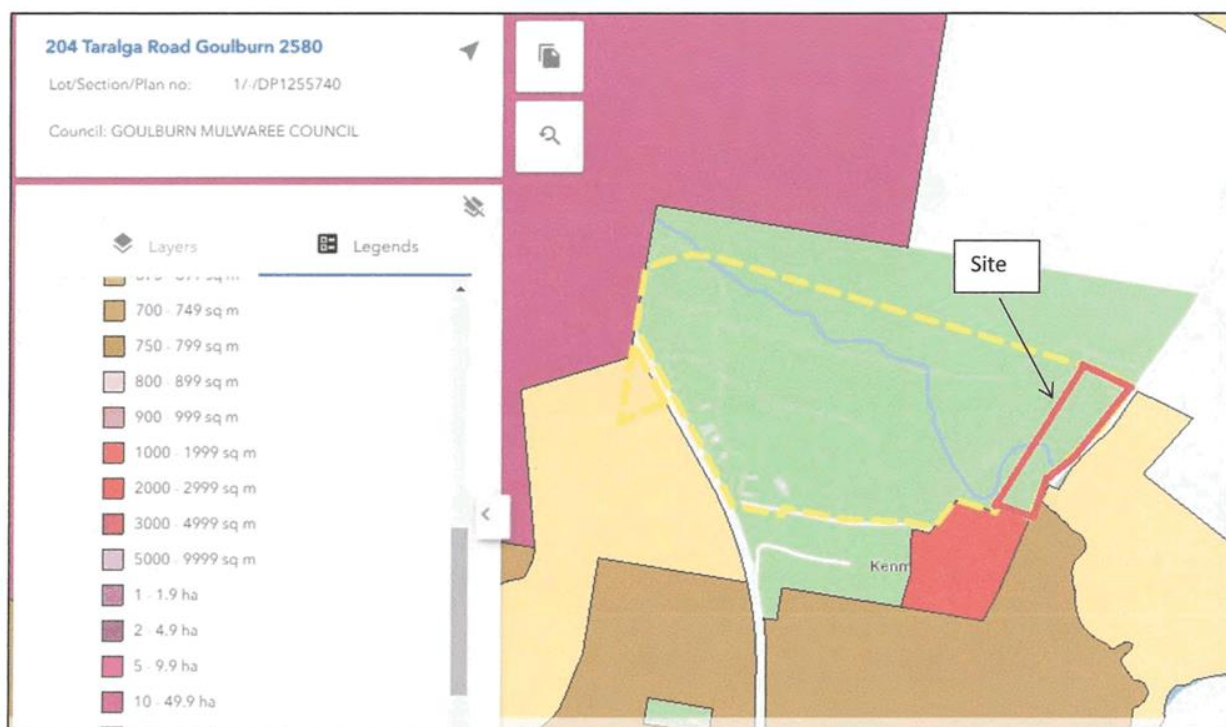
Narlisa Cooper
LATERALS PLANNING
11 December 2019



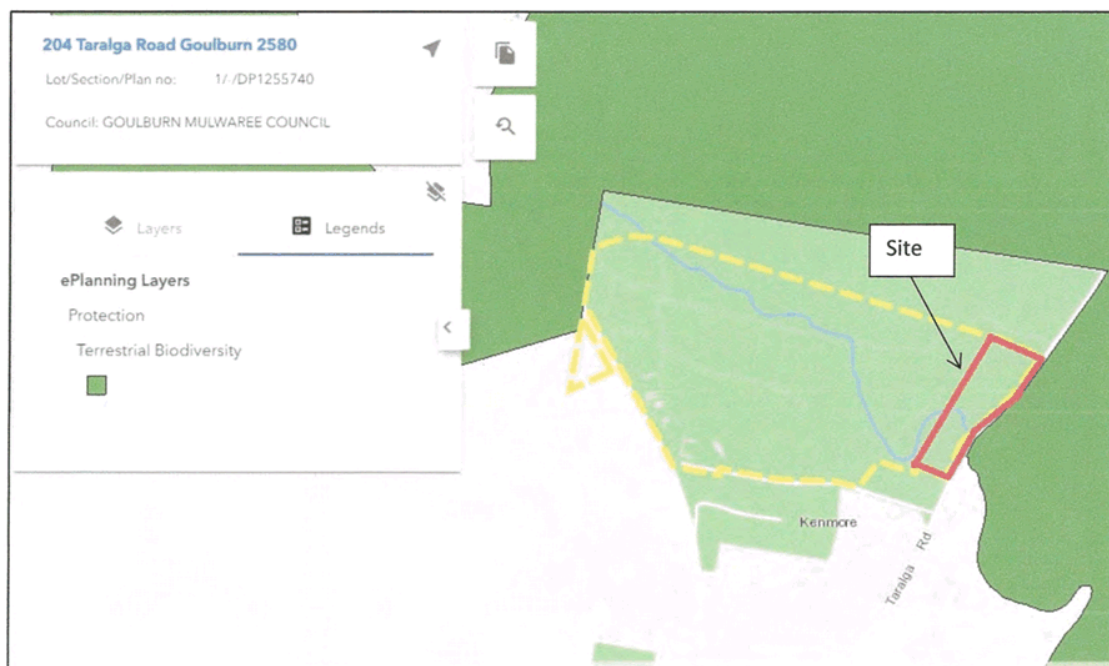
Site Aerial Photograph
(Source: Six Viewer)



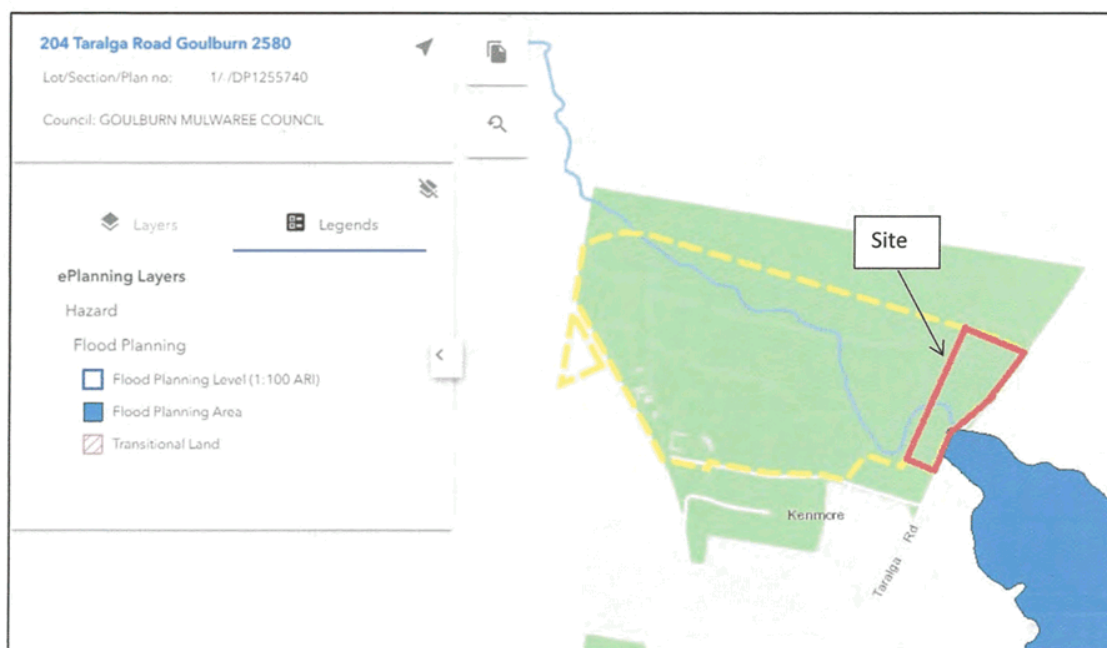
Zoning Plan
(Map Source: NSW Planning Portal)



Lot Size Map
(Map Source: NSW Planning Portal)



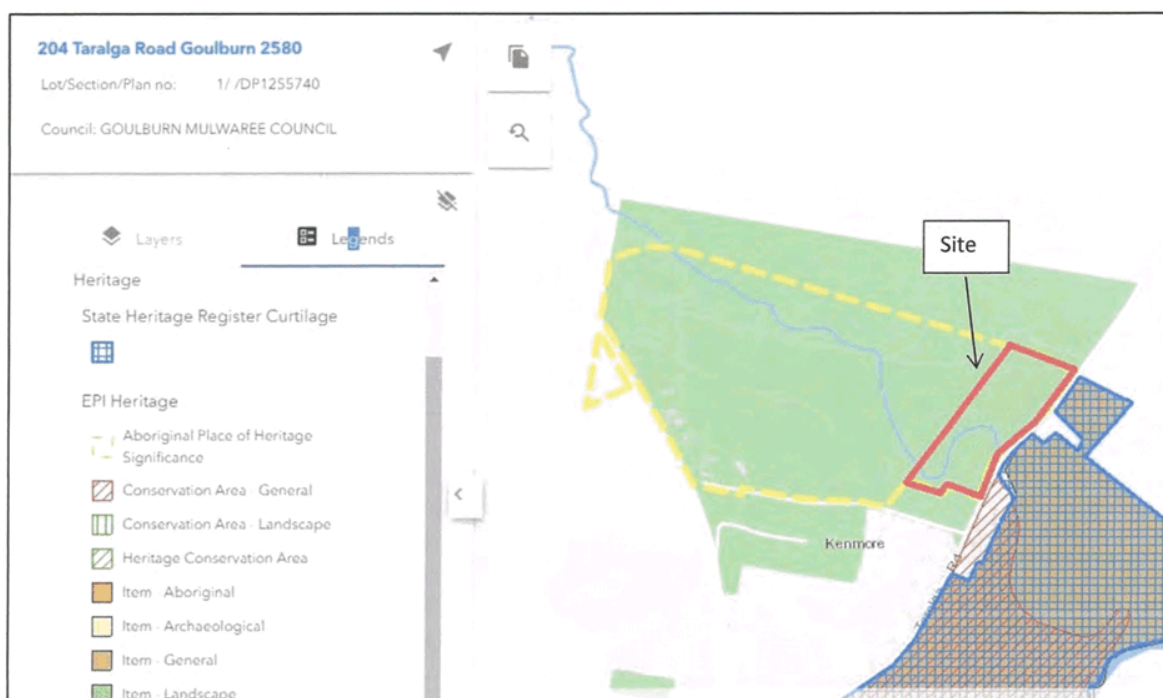
Terrestrial Biodiversity Map
(Map Source: NSW Planning Portal)



Flood Planning Map
 (Map Source: NSW Planning Portal)



Topographic Map
(Map Source: Six Maps)

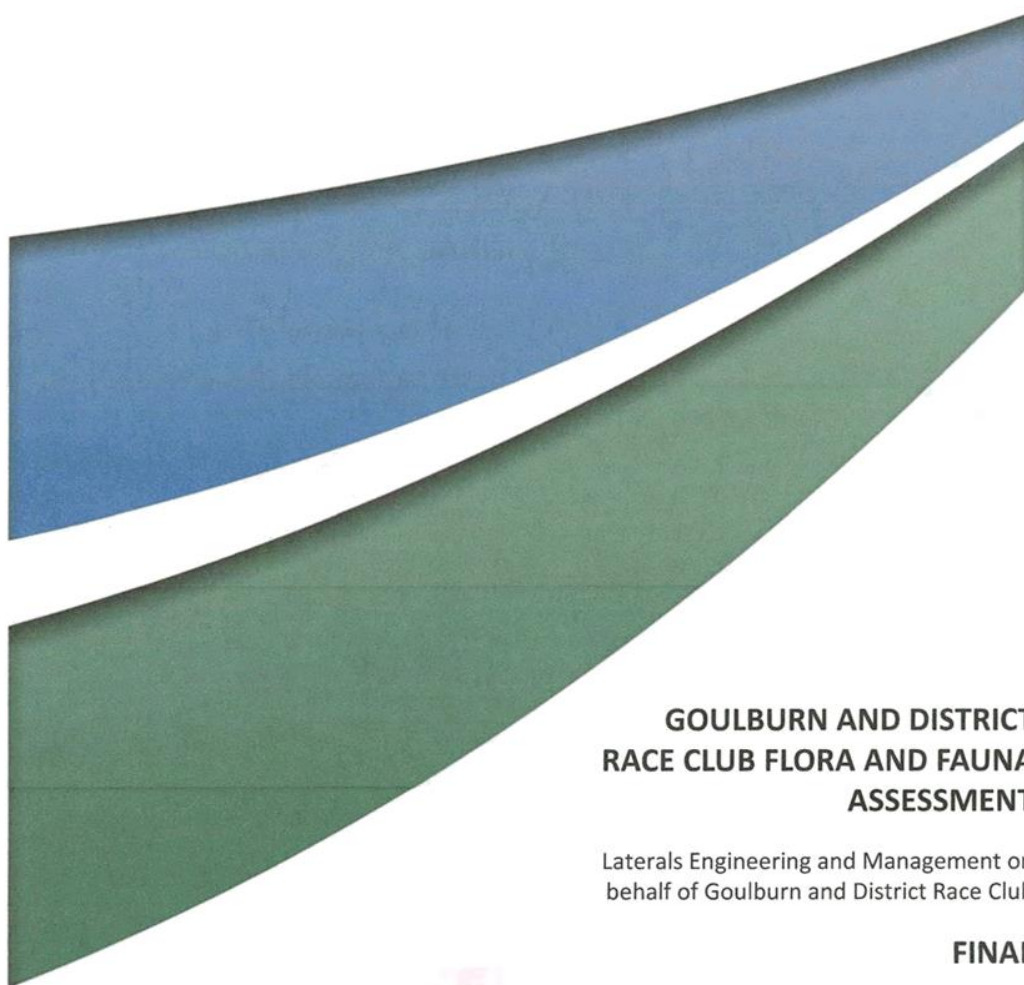


Heritage Map
 (Map Source: NSW Planning Portal)



Bushfire Map
(Map Source: NSW Planning Portal)





**GOULBURN AND DISTRICT
RACE CLUB FLORA AND FAUNA
ASSESSMENT**

Laterals Engineering and Management on
behalf of Goulburn and District Race Club

FINAL

December 2019

GOULBURN AND DISTRICT RACE CLUB FLORA AND FAUNA ASSESSMENT

Laterals Engineering and Management on
behalf of Goulburn and District Race Club

FINAL

Prepared by
Umwelt (Australia) Pty Limited
on behalf of
Laterals Engineering and Management

Project Director: David Moore
Project Manager: Philippa Fagan
Report No. 8192/R01
Date: December 2019



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Appendix A	Likelihood of Occurrence Table
Appendix B	Assessment of Significance

Doublet and Distinct Rice Cultivation and Farm Assessment
 2019_R01_V2.docx



1.0 Introduction

1.1 Background and Purpose

Umwelt (Australia) Pty Limited (Umwelt) has been commissioned by Laterals Engineering and Management (Laterals) to prepare a flora and fauna report for a section of the Goulburn and Districts Raceway (part Lot 1 DP 1255740) Kenmore, NSW (the 'Project Area'; **Figure 1.1**). The purpose of this report is to describe the current biodiversity values of the Project Area and identify ecological constraints to inform a rezoning application and advise of potential future assessment requirements.

The Project Area is approximately 9.7 hectares (ha) in a semi-rural context and currently zoned as "RE2 Private Recreation". Umwelt understand that Laterals is applying to rezone the eastern portion of Lot 1 DP 1255740 for future development purposes. A preliminary ecological assessment is required to inform the rezoning process and project design by identifying potential ecological constraints or triggers for the Biodiversity Assessment Method (BAM). If so, this would likely require preparation of a Biodiversity Development Assessment Report (BDAR) to be prepared for any future DA application under the Biodiversity Offsets Scheme (BOS).

The BOS would apply to the future development application if:

- the amount of native vegetation being cleared exceeds a threshold area based on minimum lot size (*the applicable threshold on the identified lot is 0.5 hectares*)
- the impacts occur on an area mapped on the Biodiversity Values map published by the Minister for the Environment or
- potential impacts on threatened species or ecological communities listed under the BC Act are determined to be significant under section 7.3 of the BC Act.

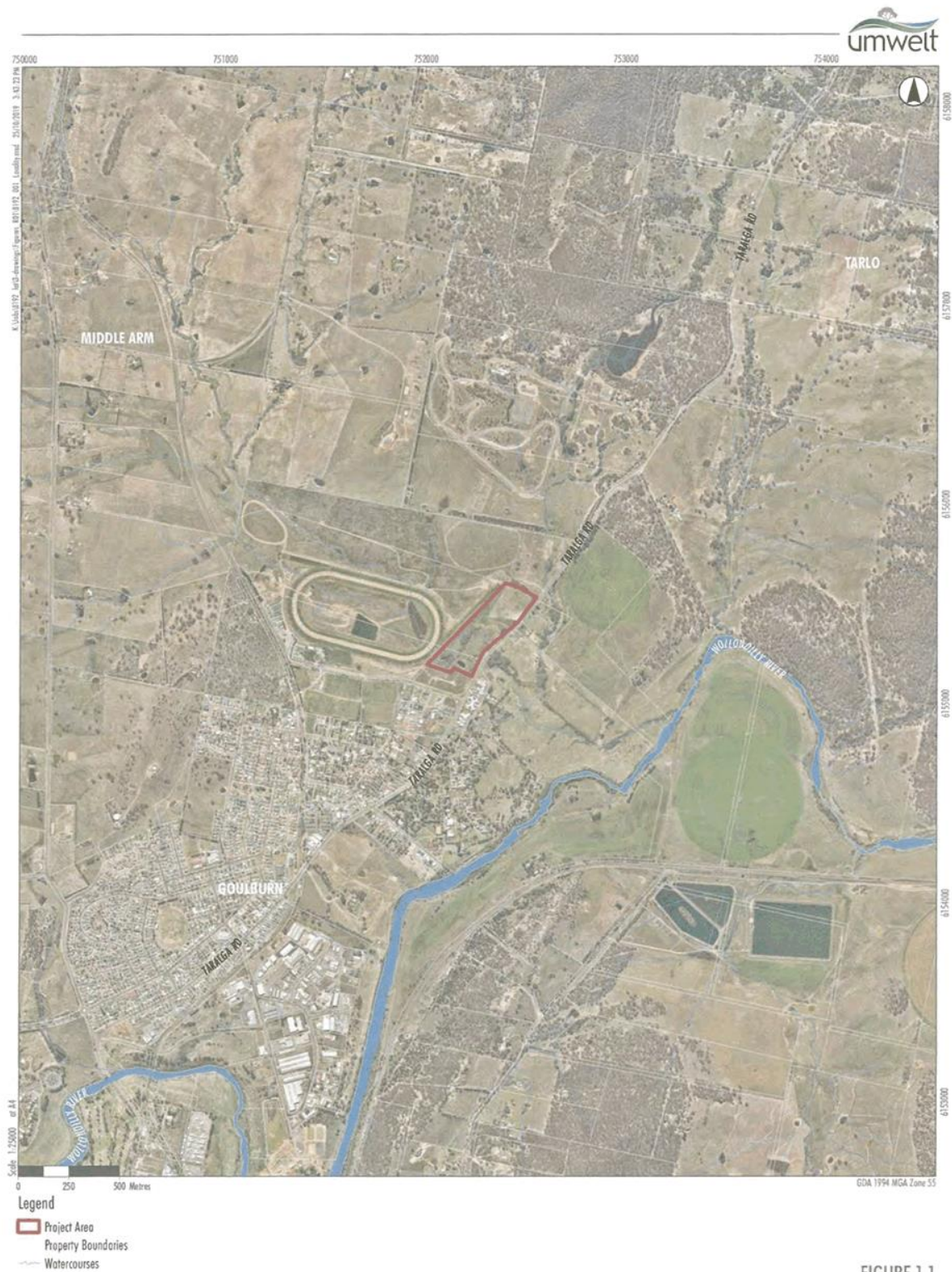


FIGURE 1.1
Project Locality

Image Source: Nearmap (March 2018) Data source: NSW LPI (2019)



FIGURE 1.2
Project Area

Image Source: Neomaps (March 2018) Data source: NSW LPI (2019)



2.0 Methods

2.1 Literature review

In order to identify threatened and migratory species, endangered populations, and threatened ecological communities (TECs) (or their habitats) with the potential to occur in the Project Area, a detailed assessment of relevant ecological databases was completed. These database searches comprised:

- a 10 kilometre (km) radius search of the Office of Environment and Heritage (OEH) Atlas of NSW Wildlife Database (accessed September 2019) (OEH 2019a)
- a 10 km radius search of the Department of the Environment and Energy (DoEE) Protected Matters Search Tool (accessed September 2019) (DoEE 2019a)
- OEH Critical Habitat Register (OEH 2016)
- A review of OEH Threatened Species Profiles Database (OEH 2019b)
- preliminary review of the modelled distribution of vegetation communities recorded as part of the Southeast NSW Native Vegetation Classification and Mapping (SCIVL) (OEH 2018)
- Goulburn Mulwaree Local Environment Plan 2009 (Goulburn Mulwaree Council 2009).

Aerial imagery of the Project Area and surrounding locality were also reviewed to gain an appreciation of the extent of vegetation communities within and adjacent to the Project Area.

The results of database searches for the Project Area are provided in **Appendix A**.

2.2 Site Inspection

The Project Area was assessed by Philippa Fagan on 3 October 2019, an experienced BAM accredited Umwelt ecologist. A random meander was undertaken across the Project Area during which plant communities were determined and mapped, vegetation condition assessed, and habitat features identified.

For the purpose of this preliminary flora and fauna report no detailed floristic structure plots or targeted threatened species surveys were conducted.

The site inspection involved:

- assessing and describing the existing environment in relation to terrestrial flora and fauna species and communities
- identifying key ecological features including hollow-bearing trees, fallen timber and man-made structures with the potential to provide habitat for threatened fauna
- identifying presence of or potential habitat for threatened and migratory species, endangered populations or TECs listed under the BC Act and/or the EPBC Act
- taking rapid vegetation assessments and recording dominant flora species



All vascular plants recorded were identified using keys and nomenclature provided in Harden (1992; 1993; 2000; 2002). Where known, taxonomic and nomenclatural changes have been incorporated into the results, as derived from PlantNET (Botanic Gardens Trust, 2019).

2.2.1 Vegetation surveys

A preliminary review of available aerial photographs and vegetation mapping was undertaken to inform the design of the vegetation surveys.

Regional vegetation mapping (OEH 2018) identified the Project Area as predominantly 'cleared', with a very small patch in the southern portion mapped as 'Tablelands Swamp Flats Forest'.

Meandering transect surveys were undertaken in order to assess the vegetation within the Project Area, and to target habitat of threatened fauna species known to occur in the region. Care was also taken to inspect areas within native vegetation in the Project Area that had the potential to contain threatened flora species.

A flora species list was taken during the site visit, recording dominant plant species in the canopy, mid-storey and groundcover. This enabled the allocation of vegetation communities within the Project Area, with descriptions of vegetation communities in **Section 3.2**.

This information was used to classify areas of native vegetation as Plant Community Types (PCTs) using the OEH Vegetation Information System (VIS) Classification Database (OEH 2019c). Areas of non-native vegetation were also identified and mapped.

2.2.2 Fauna surveys

Fauna habitat assessments undertaken during the site inspection included:

- fauna habitat assessment targeting identification of threatened fauna habitat niches such as hollow-bearing trees, nests, species-specific feed trees and artificial habitats.
- opportunistic diurnal bird surveys
- opportunistic diurnal reptile and frog surveys
- opportunistic scats, pellet and fauna track searches
- any other relevant opportunistic observations.

2.2.3 Prevailing weather conditions

The closest open weather station to the Project Area is located at Goulburn Airport (station 070330) located approximately 10 km south of the Project Area (BOM 2019).

The field surveys were completed on 3 October 2019. The weather conditions recorded a temperature range of 1.6 degrees Celsius to 26.8 degrees Celsius and no rain was recorded on that day. Wind direction was WNW with maximum winds of 15 km/hr (BOM 2019).



2.3 Limitations

The survey was influenced by limitations in time and by seasonal factors as the site inspection was conducted during one season (spring) and one sampling period. This reduces the likelihood of identifying a range of potentially occurring threatened species which may only utilise the habitats of the Project Area periodically or seasonally.

Furthermore, due to the relatively small size and disturbed nature of the Project Area, no targeted flora or fauna surveys were undertaken. However, where any threatened species were considered to have potential to utilise the Project Area, Assessments of Significance were conducted and are located within **Appendix B**.



3.0 Results

3.1 Project Area Setting

The Project Area is located along Taralga Road at Kenmore. A summary of the environmental setting and physical characteristics of the Project Area is provided in **Table 3.1**.

Table 3.1 Ecological Setting of the Project Area

Aspect	Description
Project area Size	9.7 hectares (ha)
Lot and DP	Part Lot 1 DP 1255740
Local Government Area	Goulburn Mulwaree Council
Current Zoning	RE2 – Private Recreation
LEP mapping	Not mapped as environmentally sensitive land Not mapped on terrestrial biodiversity map
Catchment Management Area	Goulburn - Broken
IBRA Region	South Eastern Highlands
IBRA Sub-region	Oberon
Mitchell Landscape	SEH Lake Basins
Watercourses	Two small drainage channels, one of which is mapped as 'Kenmore Creek'
Geology	Silurian and Devonian slates, shales and sandstones
Soil Landscapes	Breadalbane swamps and lagoons landscape. Basalt caps and flows on highest crests. Rounded and stepped hills of plateau, dendritic drainage pattern parallels basalts on crests and ridges. Red and yellow texture contrast soils on slopes, well-structured deep red loams on basalt (Mitchell 2002).

3.2 Plant community Types

Regional vegetation mapping (OEH 2018) identified that the Project Area contains a small patch of 'Tablelands Swamp Flats Forest'. The site visit disproved this mapping and confirmed that this PCT is not present on the basis that the Project Area was found to comprise almost entirely exotic vegetation. There is a very minor area (approximately 0.03 ha) that is dominated by the native species broadleaf cumbungi (*Typha orientalis*) which exists solely within a drainage line running north-south within the Project Area. Aside from this patch, native species are not dominant and are scattered throughout the Project Area amongst the more dominant exotic species.


A map showing the vegetation identified in the Project Area is provided in **Figure 3.1**.



Image Source: Neomaps (March 2018) Data source: NSW LPI (2019)



Table 3.2 Exotic vegetation within the Project Area

PCT Name	Not applicable	
Condition	Exotic Vegetation	
Formation	NA	
PCT Per cent cleared	NA	
Area within the Project Area (ha)	9.7	
General Description	This vegetation type occurs across the entire Project Area (refer to Figure 3.1). The Project Area consists largely of floodplain flats adjacent to Kenmore Creek.	
Canopy Description	This vegetation zone is dominated by exotic tree species such as willows (<i>Salix spp.</i>), ornamental fruit trees (<i>Prunus spp.</i>), silver birch (<i>Betula pendula</i>) and slash pines (<i>Pinus elliottii</i>).	
Mid-storey Description	The midstorey is relatively sparse and is dominated by exotic species such as blackberry (<i>Rubus anglocandicans</i>) and African boxthorn (<i>Lycium ferocissimum</i>), with very occasional occurrences of the native sifton bush (<i>Cassinia sifton</i>).	



PCT Name	Not applicable
Condition	Exotic Vegetation
Ground Cover Description	<p>The groundcover is largely dominated by pasture grasses, particularly Phalaris (<i>Phalaris aquatica</i>) and soft brome (<i>Bromus hordeaceus</i>). Other dominant exotic species include plantain (<i>Plantago lanceolata</i>), St. John's wort (<i>Hypericum perforatum</i>), scotch thistle (<i>Onopordum acanthium</i>), rye grass (<i>Lolium perenne</i>), catsear (<i>Hypochaeris radicata</i>), white clover (<i>Trifolium repens</i>), oats (<i>Avena barbata</i>), cape daisy (<i>Dimorphotheca ecklonis</i>) and mustard weed (<i>Brassica juncea</i>).</p> <p>Occasional natives are scattered amongst the exotic species and include swamp dock (<i>Rumex brownii</i>), tussock (<i>Poa labillardierei</i>), native geranium (<i>Geranium homeanum</i>), tall sedge (<i>Carex appressa</i>), two- colour simile (<i>Panicum simile</i>), <i>Juncus usitatus</i> and blue storkbill (<i>Erodium crinitum</i>).</p>
BC Act Status	Not applicable.
EPBC Act Status	Not applicable.

3.2.1 Unvegetated land

No unvegetated land occurs within the Project Area, aside from a dam at the southern end of the site.

3.3 Priority Weed Species

Four exotic species within the Project Area are identified as Weeds of National Significance (WONS) by the Department of Primary Industries (DPI) *NSW Weedwise* (2019b), and one with prohibition on dealings in the Goulburn Mulwaree region, as shown in **Table 3.3**.

Table 3.3 Fauna recorded on site

Scientific Name	Common name	Biosecurity Duty	Region to which biosecurity duty applies
<i>Hypericum perforatum</i>	St. John's wort	Prohibition on dealings	All of NSW
<i>Lycium ferocissimum</i> *	African boxthorn	Prohibition on dealings	All of NSW
<i>Rubus anglocandicans</i> *	blackberry	Prohibition on dealings	All of NSW
<i>Salix spp</i> *	willows	Prohibition on dealings	All of NSW
<i>Senecio madagascariensis</i> *	fireweed	Prohibition on dealings	All of NSW

*WONS

3.4 Wildlife Connectivity Corridors

Due to the fragmented and historically disturbed nature of the general region surrounding the Project Area, there is a general lack of habitat connectivity in the local area and region. Much of the surrounding vegetation shows signs of historical clearance and is highly fragmented in an agricultural landscape. No substantial or regionally significant wildlife connectivity corridors were identified within the Project Area.



3.4.1 Fauna Habitat

No critical habitat listed under the BC Act or EPBC Act was identified within the Project Area.

Due to the disturbed and exotic nature of the Project Area, there are very few fauna habitat features. Furthermore, the dominance of exotic tree species in the Project Area mean that there is little availability of decorticated bark where fauna such as bats, reptiles, frogs or insects could shelter. Only one willow (*Salix spp.*) was observed to contain very small hollows, fissures and cracks that would be suitable for sheltering smaller fauna species such as microbats, reptiles and insects.

There are several large man-made log piles which appear to have been recently created (**Plate 3.1**), and these would be suitable for providing shelter for reptile and insect species. Furthermore, while blackberry (*Rubus anglocandicans*) is an invasive species, thickets in the Project Area provide habitat for smaller bird species such as fairy-wrens (*Malurus spp.*) and thornbills (*Acanthiza spp.*), as well as reptiles.

There is a drainage culvert situated within the Project Area (**Plate 3.2**) which could potentially provide roosting habitat for microbats, as well as sheltering habitat for reptiles and amphibians. It was also being used by a large colony of fairy martins for breeding, with active mud nests attached to the roof of the culvert.

The availability of water in the Project Area is an important resource for local fauna and presents habitat for local amphibian and insect species, as well as a drinking resource for birds, mammals and reptiles (**Plate 3.3**).

A burrow was observed during the site visit, which appeared to belong to the common wombat (*Vombatus ursinus*), but this was not confirmed.



Plate 3.1 Man-made log piles in the Project Area



Plate 3.2 *Drainage culvert in the Project Area*



Plate 3.3 *Water availability in the Project Area*



3.5 Fauna

Fauna recorded during the site inspection is listed in **Table 3.4**.

Table 3.4 Fauna recorded on site

Scientific Name	Common name	Status	
		BC Act	EPBC Act
Birds			
<i>Anas superciliosa</i>	pacific black duck	-	-
<i>Corvus coronoides</i>	Australian raven	-	-
<i>Cracticus tibicen</i>	Australian magpie	-	-
<i>Eolophus roseicapilla</i>	galah	-	-
<i>Grallina cyanoleuca</i>	magpie- lark	-	-
<i>Malurus cyaneus</i>	superb- fairy wren	-	-
<i>Neochmia temporalis</i>	red- browed firetail	-	-
<i>Petrochelidon ariel</i>	fairy martin	-	-
<i>Platycercus elegans</i>	crimson rosella	-	-
<i>Rhipidura albiscapa</i>	grey fantail	-	-
<i>Rhipidura leucophrys</i>	willy wagtail	-	-
<i>Sericornis frontalis</i>	white-browed scrubwren	-	-
<i>Todiramphus sanctus</i>	sacred kingfisher	-	-
<i>Zosterops lateralis</i>	silveryeye	-	-
Amphibians			
<i>Crinia parinsignifera</i>	eastern sign- bearing froglet	-	-
Reptiles			
<i>Tiliqua scincoides</i>	eastern blue- tongue lizard	-	-

3.6 Threatened species assessment

A total of 44 threatened and/or migratory fauna species, 16 threatened flora species and two TECs listed under the NSW BC Act and/or the Commonwealth EPBC Act were identified in the PMST and/or the BioNet search as occurring or having the potential to occur within 10 km of the Project Area (**Appendix A**).

No threatened or migratory species, endangered populations or TECs were identified in the Project Area during the site inspection on 3 October 2019.

The exotic vegetation within the Project Area may provide permanent or seasonal foraging habitat for more mobile threatened species such as birds and bats. The disturbed and exotic nature of the vegetation and the surrounding locality means that the Project Area is unlikely to support the breeding and roosting requirements of threatened species.



Five-Part Tests under Section 7.3 of the BC Act were undertaken for any threatened species with potential to utilise the Project Area and are provided in **Appendix B**.

The assessments concluded that any removal of the vegetation within the Project Area is unlikely to result in a significant impact under the BC Act to any threatened species, populations or ecological communities.

3.7 Matters of National Environmental Significance

Threatened species, populations, communities and migratory species listed under the EPBC Act that have the potential to occur within the Project Area were identified in the ecological desktop assessment (see **Appendix A**).

Table 3.5 lists Matters of National Environmental Significance (MNES) as identified from the DoEE's PMST (**Appendix A**) (DoEE 2019a).

Table 3.5 Consideration of MNES and other matters

MNES	Applicability to the Project
World Heritage Properties	Not applicable
National Heritage Places	Not applicable
Ramsar wetlands	None within the locality
Threatened species and ecological communities	The PMST identified 37 threatened fauna and flora species and five TECs (Appendix A) that could potentially occur within a 10 km radius. No threatened species were identified within the Project Area.
Migratory species	The PMST identified 11 listed migratory species (not including marine and shorebird species) (Appendix A) that could potentially occur within a 10-km radius. No migratory species were identified within the Project Area.
Commonwealth marine areas	Not applicable
Great Barrier Reef Marine Park	Not applicable
Nuclear actions (including uranium mining)	Not applicable
A water resource, in relation to coal seam gas development and large coal mining development	Not applicable
Commonwealth land	Not applicable
Commonwealth agencies proposing action	Not applicable

An Assessment of Significance (according to the significant impact guidelines 1.1 (Department of the Environment and Energy 2013 (DoEE)) is provided in **Appendix B** for threatened species or ecological communities with the potential to occur in the Project Area.



4.0 Discussion

4.1 Assessment of significance

4.1.1 BC Act

A Five-Part Test under Section 7.3 of the BC Act was undertaken for five threatened species (black falcon, little eagle, eastern false pipistrelle, eastern coastal free-tailed bat and eastern bentwing-bat) that have the potential to occur in the vicinity of the Project Area (refer to **Appendix B**). No TECs are considered to occur within the Project Area. Given that no activity is as yet proposed for the Project Area, the Five-Part Test assumed the worst-case scenario, being removal of all vegetation in the Project Area.

A single combined Five-Part Test was completed for the five species, and concluded that the Project is not likely to result in a significant impact to any listed threatened species, given the already disturbed and exotic nature of the Project Area, and the availability of similar habitat in the surrounding area.

4.1.2 EPBC Act

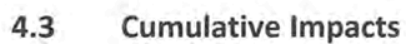
Under the Commonwealth EPBC Act, the approval of the Commonwealth Minister for the Environment and Energy is required for any action that may have a significant impact on matters of national environmental significance (MNES). These matters are:

- listed threatened species and communities
- migratory species protected under international agreements
- Ramsar wetlands of international importance
- the Commonwealth marine environment
- the Great Barrier Reef Marine Park
- World Heritage properties
- National Heritage places
- nuclear actions
- a water resource, in relation to coal seam gas development and large coal mining development.

No threatened species, populations, communities or migratory species listed under the EPBC Act are considered to have the potential to occur within the Project Area.

4.2 Wildlife Connectivity and habitat fragmentation

Due to the general mosaic of cleared areas in the region associated with agricultural and residential land use there is a general lack of habitat connectivity in the local area. No regionally significant wildlife connectivity corridors were identified within the Project Area or nearby.



Equilibrium and Disturbance: Club Flora and Fauna Assessment
 11/02/2011 17:00:00



5.0 Conclusion

The Project Area is entirely vegetated with exotic vegetation and contains very few habitat features. These features are limited to man-made log piles and a drainage culvert, and one non-native hollow-bearing tree containing very small hollows, cracks and fissures. The presence of water in the Project Area does provide for the habitation of native fauna, but these would likely be limited to those that can subsist in a more urban environment, or those that visit seasonally or periodically.

No migratory species, endangered populations or threatened ecological communities were recorded within the study area during the survey.

The proposed activity is considered unlikely to have a significant impact upon any threatened species, populations or threatened ecological communities that may utilise the Project Area. While a minor area (9.7 ha) of exotic vegetation has the potential to be impacted, which has been determined to potentially provide habitat for five locally occurring threatened species, this is unlikely to cause a decline in any locally occurring populations of these species. Assessments of Significance have been prepared for these matters, with no significant impacts anticipated for any of these threatened species. Similar habitat is available in a much wider area surrounding the Project Area. A referral to the Commonwealth Department of the Environment and Energy is not required.

Following field surveys and desktop assessment, it has been determined that the BOS would not be triggered by any future development within the Project Area. This is because:

- no native vegetation communities are present within the Project Area
- the Project Area does not occur in an area mapped on the Biodiversity Values map
- potential impacts on threatened species or ecological communities listed under the BC Act are not determined to be significant under section 7.3 of the BC Act.

In considering the impact of any future project on biodiversity values, this assessment has examined and taken into account to the fullest extent possible, all matters affecting or likely to affect the environment by that activity.

Rehabilitation of the riparian areas along Kenmore Creek with native flora species is recommended upon completion of the project, which would help to encourage native species to recolonise the site. These areas are currently dominated by introduced willow species (*Salix spp.*) and removal of these WONS would help to rehabilitate the ecological values of the Project Area.

The Project would have some minimal environmental impacts which can be ameliorated satisfactorily through the implementation of specific controls and mitigation measures. Therefore, the environmental impacts from the Project are expected to be minor and a species impact statement and biodiversity offset strategy are not required.



6.0 References

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APPENDIX A
Likelihood of Occurrence Table



Scientific Name	Common Name	BC Act	EPBC Act	BioNet records (<10 km)	Habitat Requirements	Likelihood of Occurrence
Ecological communities						
Natural temperate grassland of the south eastern highlands			CE	-	The ecological community is characterised by a dominance of native perennial tussock grasses, the tallest stratum of which is typically up to 1.0 m in height, when present. There is usually a second, lower stratum of shorter perennial and annual grasses and forbs growing between the taller tussocks, and there may be a third discontinuous stratum of even smaller forbs, grasses and cryptogams. Sedges and rushes may also occur, particularly in seasonally wet areas. A tree and shrub stratum may be present, but with only up to 10% projective foliage cover of each being present.	Nil. Site assessment confirmed this community is not present in the Project Area.
White box-yellow box-Blakely's red gum grassy woodland and derived native grassland		CE	CE	-	Characterised by the presence or prior occurrence of White Box, Yellow Box and/or Blakely's Red Gum. The understorey in intact sites is characterised by native grasses and a high diversity of herbs; the most commonly encountered include Kangaroo Grass (<i>Themeda australis</i>), Poa Tussock (<i>Poa sieberiana</i>), wallaby grasses (<i>Austrodanthonia</i> spp.), spear-grasses (<i>Austrostipa</i> spp.), Common Everlasting (<i>Chrysocephalum apiculatum</i>), Scrambled Eggs (<i>Goodenia pinnatifida</i>), Small St John's Wort (<i>Hypericum gramineum</i>), Narrow-leaved New Holland Daisy (<i>Vittadinia muelleri</i>) and blue-bells (<i>Wahlenbergia</i> spp.).	Nil. Site assessment confirmed this community is not present in the Project Area.
Plants						
<i>Acacia bynoeana</i>	Bynoe's wattle	E	V	0	Occurs mainly in heath and dry sclerophyll forest, open woodland with dense to sparse heath understorey; open woodlands with a sparse shrub cover and a grass/sedge ground cover; and heathlands with sparse overstorey. With sand or sandy clay substrate, often with ironstone gravel and usually well drained, infertile soil.	Nil. No habitat present due to the highly disturbed and agricultural nature of the Project Area. This species has not previously been recorded within 10 km of the Project Area.



Scientific Name	Common Name	BC Act	EPBC Act	BioNet records (<10 km)	Habitat Requirements	Likelihood of Occurrence
<i>Bossiaea oligosperma</i>	few-seeded bossiaea	V	V	1	Occurs on stony slopes or ridges on sandstone in the Yerranderie area. Occurs in low woodland on loamy soil in the Windellama area.	Nil. No habitat present due to the highly disturbed nature of the Project Area. Not detected during site assessment.
<i>Caladenia tessellata</i>	thick-lipped spider-orchid	E	V	0	Known from the Sydney area (old records), Wyong, Ulladulla and Braidwood in NSW. Populations in Kiama and Queanbeyan are presumed extinct. Generally found in grassy sclerophyll woodland on clay loam or sandy soils, though the population near Braidwood is in low woodland with stony soil.	Low. No habitat present due to the highly disturbed nature of the Project Area. This species has not previously been recorded within 10 km of the Project Area.
<i>Diuris aequalis</i>	buttercup doubletail	E	V	2	Grows among grass in sclerophyll forest, mainly in the ranges and tablelands; chiefly from Braidwood to Kanangra and Liverpool.	Low. No habitat present due to the highly disturbed nature of the Project Area.
<i>Dodonaea procumbens</i>	trailing hop-bush	V	V	0	Found in the dry areas of the Monaro, between Michelago and Dalgety. There is one population at Lake Bathurst. Grows in Natural Temperate Grassland or fringing eucalypt woodland of Snow Gum (<i>Eucalyptus pauciflora</i>)	Low. No habitat present due to the highly disturbed nature of the Project Area. This species has not previously been recorded within 10 km of the Project Area.



Scientific Name	Common Name	BC Act	EPBC Act	BioNet records (<10 km)	Habitat Requirements	Likelihood of Occurrence
<i>Eucalyptus aggregata</i>	black gum	V	V	0	Grows in the lowest parts of the landscape. Grows on alluvial soils, on cold, poorly-drained flats and hollows adjacent to creeks and small rivers. Often grows with other cold-adapted eucalypts, such as Snow Gum or White Sallee (<i>Eucalyptus pauciflora</i>), Manna or Ribbon Gum (<i>E. viminalis</i>), Candlebark (<i>E. rubida</i>), Black Sallee (<i>E. stellulata</i>) and Swamp Gum (<i>E. ovata</i>). Black Gum usually occurs in an open woodland formation with a grassy groundlayer dominated either by River Tussock (<i>Poa labillardierei</i>) or Kangaroo Grass (<i>Themeda australis</i>), but with few shrubs.	Not Present. Not detected during surveys in the Project Area. This species has not previously been recorded within 10 km of the Project Area.
<i>Lepidium hyssopifolium</i>	basalt pepper- cress	E	E	0	Known to occur in both woodland with a grassy understorey and in grassland. In NSW, there is a small population near Bathurst, one population at Bungendore, and one near Crookwell.	Low. No habitat present due to the highly disturbed nature of the Project Area. This species has not previously been recorded within 10 km of the Project Area.
<i>Leucochrysum albicans</i> var. <i>tricolor</i>	hoary sunray	E	E	6	Occurs in a wide variety of grassland, woodland and forest habitats, generally on relatively heavy soils.	Low. No habitat present due to the highly disturbed nature of the Project Area.
<i>Pelargonium</i> sp. <i>Striatellum</i> (G.W. Carr 10345)	Omeo storksbill	E	E	0	Occurs above the high-water level of irregularly inundated or ephemeral lakes - in the transition zone between grassland/pasture and wetland/aquatic communities.	Low. No habitat present due to the highly disturbed nature of the Project Area. This species has not previously been recorded within 10 km of the Project Area.



Scientific Name	Common Name	BC Act	EPBC Act	BioNet records (<10 km)	Habitat Requirements	Likelihood of Occurrence
<i>Pomaderris cotoneaster</i>	cotoneaster pomaderris	E	E	0	Occurs in forest with deep, friable soil, amongst rock beside a creek, on rocky forested slopes and in steep gullies between sandstone cliffs.	Not Present. Not detected during surveys in the Project Area. This species has not previously been recorded within 10 km of the Project Area.
<i>Pomaderris delicata</i>	delicate pomaderris	E	CE	1	At both known sites the Delicate Pomaderris grows in dry open forest dominated by <i>Eucalyptus sieberi</i> with a dense she-oak understorey. Soils are shallow and derived from sandstone and siltstone.	Not Present. Not detected during surveys in the Project Area.
<i>Pomaderris pallida</i>	pale pomaderris	V	V	0	Occurs in open forest, confined to the Cotter and Paddy's Rivers district in the A.C.T.	Not Present. Not detected during surveys in the Project Area. This species has not previously been recorded within 10 km of the Project Area.
<i>Prasophyllum petilum</i>	Tarengo leek orchid	E	E	0	Grows in open sites within Natural Temperate Grassland at Boorowa and Delegate sites. Also grows in grassy woodland in association with River Tussock (<i>Poa labillardieri</i>), Black Gum (<i>Eucalyptus aggregata</i>) and tea-trees (<i>Leptospermum</i> spp.) near Queanbeyan and within the grassy groundlayer dominated by Kangaroo Grass under Box-Gum Woodland at Ilford (and Hall, ACT).	Low. No habitat present due to the highly disturbed nature of the Project Area.



Scientific Name	Common Name	BC Act	EPBC Act	BioNet records (<10 km)	Habitat Requirements	Likelihood of Occurrence
<i>Rutidosia leptorrhynchoidea</i>	button wrinklewort	E	E	2	Grows in grassland and woodland; in the A.C.T. and Monaro regions. Box-Gum Woodland, secondary grassland derived from Box-Gum Woodland or in Natural Temperate Grassland; and often in the ecotone between the two communities. Grows on soils that are usually shallow, stony red-brown clay loams; tends to occupy areas where there is relatively less competition from herbaceous species (either due to the shallow nature of the soils, or at some sites due to the competitive effect of woodland trees).	Low. No habitat present due to the highly disturbed nature of the Project Area.
<i>Swainsona recta</i>	small purple-pea	E	E	0	Occurs in grassland and open woodland, often on stony hillsides. Small Purple-pea occurred in the grassy understorey of woodlands and open-forests dominated by Blakely's Red Gum (<i>Eucalyptus blakelyi</i>), Yellow Box (<i>E. melliodora</i>), Candlebark Gum (<i>E. rubida</i>) and Long-leaf Box (<i>E. goniocalyx</i>). Grows in association with understorey dominants that include Kangaroo Grass (<i>Themeda australis</i>), Poa tussocks <i>Poa</i> spp. and spear-grasses <i>Austrostipa</i> spp.	Low. No habitat present due to the highly disturbed nature of the Project Area. Not detected during surveys in the Project Area. This species has not previously been recorded within 10 km of the Project Area.
<i>Thesium australe</i>	austral toadflax	V	V	0	Occurs in grassland on coastal headlands or grassland and grassy woodland away from the coast. Often found in association with Kangaroo Grass (<i>Themeda australis</i>).	Low. No habitat present due to the highly disturbed nature of the Project Area. This species has not previously been recorded within 10 km of the Project Area.



Scientific Name	Common Name	BC Act	EPBC Act	BioNet records (<10 km)	Habitat Requirements	Likelihood of Occurrence
Birds						
<i>Anthochaera phrygia</i>	regent honeyeater	CE	CE	0	Occur mainly in dry box ironbark open-forest and woodland areas inland of the Great Dividing Range, particularly favouring those on the wettest, most fertile soils, such as along creek flats and broad river valleys.	Low. No foraging habitat is present in the Project Area. Very rare visitor to the Goulburn region.
<i>Artamus cyanopterus</i>	dusky woodswallow	V	-	2	Found in woodlands and dry open sclerophyll forests, usually dominated by eucalypts, including mallee associations. It has also been recorded in shrublands and heathlands and various modified habitats, including regenerating forests; very occasionally in moist forests or rainforests. Also found in farmland, usually at the edges of forest or woodland. At sites where recorded the understorey is typically open with sparse eucalypt saplings, acacias and other shrubs, including heath. The ground cover may consist of grasses, sedges or open ground, often with coarse woody debris.	Low. Habitat is generally unsuitable for this species due to the lack of any native vegetation or woody debris. Project Area is not adjacent to any contiguous native vegetation.
<i>Botaurus poiciloptilus</i>	Australasian bittern	E	E	0	The Australasian bittern's preferred habitat is comprised of wetlands with tall dense vegetation, where it forages in still, shallow water up to 0.3 m deep, often at the edges of pools or waterways, or from platforms or mats of vegetation over deep water. It favours permanent and seasonal freshwater habitats, particularly those dominated by sedges, rushes and reeds (e.g. <i>Phragmites</i> , <i>Cyperus</i> , <i>Eleocharis</i> , <i>Juncus</i> , <i>Typha</i> , <i>Baumea</i> , <i>Bolboschoenus</i>) or cutting grass (<i>Gahnia</i>) growing over a muddy or peaty substrate.	None. No suitable habitat is present in the Project Area.



Scientific Name	Common Name	BC Act	EPBC Act	BioNet records (<10 km)	Habitat Requirements	Likelihood of Occurrence
<i>Calidris ferruginea</i>	curlew sandpiper	E1	CE	0	Mainly occur on intertidal mudflats in sheltered coastal areas, such as estuaries, bays, inlets and lagoons, and also around non-tidal swamps, lakes and lagoons near the coast, and ponds in salt-works and sewage farms. They are also recorded inland, including around ephemeral and permanent lakes, dams, waterholes and bore drains, usually with bare edges of mud or sand. They occur in both fresh and brackish waters.	None. No suitable habitat is present in the Project Area.
<i>Callocephalon fimbriatum</i>	gang-gang cockatoo	V	-	1	Generally found in tall mountain forests and woodlands, particularly in heavily timbered and mature wet sclerophyll forests. In winter, may occur at lower altitudes in drier more open eucalypt forests and woodlands, and often found in urban areas.	None. No suitable habitat is present in the Project Area due to the lack of native trees suitable for feeding or breeding.
<i>Chthonicola sagittata</i>	speckled warbler	V	-	1	Lives in dry sclerophyll forests and woodlands (woodlands have fewer trees than forests) dominated by eucalypts. It is mostly seen on the grassy ground layer, when it is foraging.	None. No suitable habitat is present in the Project Area.
<i>Daphoenositta chrysoptera</i>	varied sittella	V	-	3	Found in eucalypt forests and woodlands containing rough-barked species and mature smooth-barked gums with dead branches, mallee and Acacia woodland.	None. No suitable habitat is present in the Project Area due to the lack of native tree species.
<i>Falco subniger</i>	black falcon			1	Core habitat is semi-arid and arid interior; uses tree-lined watercourses, isolated stands of trees and hunts over low vegetation of surrounding plains, grasslands, saltbush and blue-bush. Also hunts over wetlands and temporary waters or bore drains in arid regions. Typically breeds in more arid regions.	Moderate. Potential foraging habitat is present in the Project Area. No breeding habitat available.



Scientific Name	Common Name	BC Act	EPBC Act	BioNet records (<10 km)	Habitat Requirements	Likelihood of Occurrence
<i>Grantiella picta</i>	painted honeyeater	V	V	0	Found in dry open forests and woodlands and is strongly associated with mistletoe. It may also be found along rivers, on plains with scattered trees and on farmland with remnant vegetation.	None. No suitable habitat is present in the Project Area.
<i>Hieraaetus morphnoides</i>	little eagle	V	-	2	Occupies habitats rich in prey within open eucalypt forest, woodland, or open woodland. She-oak or acacia woodlands and riparian woodlands of interior NSW are also used. For nest sites it requires a tall living tree within a remnant patch.	Moderate. Potential foraging habitat is present in the Project Area. No breeding habitat available.
<i>Lathamus discolor</i>	swift parrot	E	CE	0	Occurs in woodlands and forests in NSW where it feeds on flowering trees. Breeds in Tasmania.	None. No suitable habitat is present in the Project Area due to lack of foraging resources.
<i>Numenius madagascariensis</i>	far eastern curlew	-	CE	-	Found on sheltered coasts, mangrove swamps, bays, harbours and lagoons that contain mudflats and sandflats, often with beds of seagrass. At high tide, when their feeding habitat becomes inundated, they move to saltpans, sand dunes and other open areas where they roost above the high water.	None. No suitable habitat is present in the Project Area.
<i>Petroica boodang</i>	scarlet robin	V	-	1	Occurs in eucalypt woodlands and dry, open forest, particularly where shrubs, logs, coarse woody debris and native grasses are present, but is generally absent from open areas where no trees remain.	None. No suitable habitat is present in the Project Area due to the highly disturbed and agricultural nature.



Scientific Name	Common Name	BC Act	EPBC Act	BioNet records (<10 km)	Habitat Requirements	Likelihood of Occurrence
<i>Polytelis swainsonii</i>	superb parrot	V	V	0	Found in the NSW southwest slopes as well as northern parts of the ACT and north central Victoria. Each spring they retreat towards the southwest to breed, mainly in River and Blakely's red gums. They then move further north and east, relying on woodland habitat for flowers, fruits and seed, particularly in box and Blakely's red gum	None. No suitable habitat is present in the Project Area due to lack of foraging and feeding resources.
<i>Rostratula australis</i>	Australian painted snipe	E	E	-	Shallow freshwater wetlands or saltmarshes, including inundated grasslands, dams and bore drains, generally with good cover of grasses or low scrub. A secretive and difficult species to observe; often will only flush from dense cover at close range.	None. No suitable habitat is present in the Project Area.
Amphibians						
<i>Litoria aurea</i>	green and golden bellfrog	E1	V	1	Permanent or ephemeral swamps, dams and slow flowing streams with emergent vegetation such as reeds, particularly those containing bulrushes (<i>Typha</i> spp.) and Spikerushes (<i>Eleocharis</i> spp.). Optimal habitat includes water-bodies that are unshaded, free of predatory fish such as plague minnow (<i>Gambusia holbrooki</i>), have a grassy area nearby and sheltering sites available. Can occur in highly disturbed areas. It inhabits a variety of forest types including coastal forest, open woodland and cleared areas.	None. No suitable habitat is present in the Project Area.
<i>Litoria booroolongensis</i>	booroolong Frog	E	V	0	Restricted to NSW and north-eastern Victoria, predominantly along the western-flowing streams of the Great Dividing Range. Live along permanent streams with some fringing vegetation cover such as ferns, sedges or grasses.	None. No suitable habitat is present in the Project Area.
<i>Litoria littlejohnii</i>	Littlejohn's Tree Frog	V	V	0	Restricted to sandstone woodland and heath communities at mid to high altitude. It forages both in the tree canopy and on the ground, and it has been observed sheltering under rocks, leaf litter and low vegetation in heath-based forests and woodland. It is not known from coastal habitats.	None. No suitable habitat is present in the Project Area.

Goulburn and District Race Club Flora and Fauna Assessment
8192_R01_V2.docx

Appendix A
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Scientific Name	Common Name	BC Act	EPBC Act	BioNet records (<10 km)	Habitat Requirements	Likelihood of Occurrence
Mammals						
<i>Chalinolobus dwyeri</i>	large-eared pied bat	V	V	0	Found mainly in areas with extensive cliffs and caves, from Rockhampton in Queensland south to Bungonia in the NSW Southern Highlands. It is generally rare with a very patchy distribution in NSW. They remain loyal to the same cave over many years. Forages in low to mid-elevation dry open forest and woodland close to these features.	Low. No suitable roosting habitat is present in the Project Area. Project Area is located west of known distribution. May be a very rare aerial visitor.
<i>Dasyurus maculatus</i>	spotted-tailed quoll	V	E	0	Occurs in forests, woodlands, coastal heathlands and rainforests. They are sometimes seen in open country, or on grazed areas and rocky outcrops. They are mainly solitary animals, and will make their dens in rock shelters, small caves, hollow logs and tree hollows.	Low. No suitable habitat is present in the Project Area. No records in the Goulburn region.
<i>Falsistrellus tasmaniensis</i>	eastern false pipistrelle	V		2	This species occupies tall, mature, wet forest and the species have been recorded roosting in stem holes in Eucalyptus and in buildings. Prefers moist habitats, with trees taller than 20 m. Generally roosts in eucalypt hollows, but has also been found under loose bark on trees or in buildings.	Moderate. Suitable foraging habitat is present in the Project Area.
<i>Micronomus norfolkensis</i>	Eastern coastal free-tailed bat		V	1	Occurs in dry sclerophyll forest, woodland, swamp forests and mangrove forests east of the Great Dividing Range.	Moderate. Marginal foraging habitat is present in the Project Area.
<i>Miniopterus australis</i>	Little bentwing-bat		V	1	Occurs in moist eucalypt forest, rainforest, vine thicket, wet and dry sclerophyll forest, Melaleuca swamps, dense coastal forests and banksia scrub. Generally found in well-timbered areas	Low. Marginal foraging habitat is present in the Project Area.



Scientific Name	Common Name	BC Act	EPBC Act	BioNet records (<10 km)	Habitat Requirements	Likelihood of Occurrence
<i>Miniopterus schreibersii oceanensis</i>	eastern bentwing-bat	V		4	Caves are the primary roosting habitat, but also use derelict mines, storm-water tunnels, buildings and other man-made structures. They form discrete populations centred on a maternity cave that is used annually in spring and summer for the birth and rearing of young. This species tends to hunt in forested areas.	Moderate. Suitable foraging habitat is present in the Project Area.
<i>Petauroides volans</i>	greater glider	-	V	-	Species largely restricted to eucalypt forests and woodlands. It is typically found in highest abundance in taller, montane, moist eucalypt forests with relatively old trees and abundant hollows.	None. No suitable habitat is present in the Project Area.
<i>Phascolarctos cinereus</i>	koala	V	V	0	Koalas inhabit a range of temperate, sub-tropical and tropical forest, woodland and semi-arid communities dominated by species from the genus Eucalyptus. The distribution of koalas is also affected by altitude (limited to <800 m ASL), temperature and, at the western and northern ends of the range, leaf moisture.	None. No suitable habitat is present in the Project Area.
<i>Psuedomys novaehollandiae</i>	New Holland mouse	-	V	-	Inhabit open heathlands, open woodlands with a heathland understorey, and vegetated sand dunes. Nest in burrows and have a preference for deeper top soils and softer substrates to aid digging. Spends considerable time foraging above-ground for food in areas of high floristic diversity.	None. No suitable habitat is present in the Project Area. No past records from the Goulburn area.
<i>Pteropus poliocephalus</i>	grey-headed flying-fox	V	V	15	Rainforests, open forests, woodlands and melaleuca swamps. Roosting camps are usually in dense riparian vegetation.	Low. No foraging habitat is present in the Project Area. Possible very rare aerial visitor to the Project Area given it occurs in the Goulburn area.



Scientific Name	Common Name	BC Act	EPBC Act	BioNet records (<10 km)	Habitat Requirements	Likelihood of Occurrence
<i>Saccolaimus flaviventris</i>	yellow-bellied sheath-tail-bat	V	-	1	Inhabits eucalypt rainforest, sclerophyll forest and open woodland vegetation. Availability of tree hollows is important for access to roosting sites.	Low. Marginal foraging habitat present in the Project Area.
Reptiles						
<i>Aprasia parapulchella</i>	pink-tailed worm-lizard	V	V	0	This species is found on two hills near Tarcutta, Bathurst, New South Wales, Bendigo in Victoria, and along the sides of the Molonglo River and Murrumbidgee River and on Mount Taylor in the Australian Capital Territory. The lizards eat invertebrates that live under rocks.	Low. No suitable habitat is present in the Project Area. No past records from the Goulburn region.
<i>Delmar impar</i>	striped legless lizard	V	V	0	Restricted to tussock grasslands and may occur in woodland, they are not restricted to native or primary grassland. The key to their survival in rural areas may be the availability of shelter during disturbance events (such as heavy grazing or perhaps even ploughing), from which they may be able to re-colonise disturbed sites after the cessation of the disturbance	Low. No suitable habitat is present in the Project Area.
Fish						
<i>Macquaria australasica</i>	Macquarie perch	-	E	-	Restricted to riverine environments. The Murray-Darling form of the Macquarie perch is still known to exist in waterways of Victoria, NSW and the ACT. The eastern form is confined to the Hawkesbury-Nepean and Shoalhaven river systems including a number of Sydney's water supply reservoirs (Ingram et al. 2000).	None. No suitable habitat is present in the Project Area.
Birds listed as migratory under the EPBC Act						
<i>Apus pacificus</i>	fork-tailed swift		Mi		Aerial species. The Fork-tailed Swift is a non-breeding visitor to all states and territories of Australia	Low. Although likely to utilise airspace above the Project Area this species is unlikely to utilise habitat within the Project Area.



Scientific Name	Common Name	BC Act	EPBC Act	BioNet records (<10 km)	Habitat Requirements	Likelihood of Occurrence
<i>Hirundapus caudacutus</i>	white-throated needletail		Mi		Almost exclusively aerial, often found over wooded areas, including open forest, heathland and rainforest. Less frequently observed above woodland or treeless habitat.	Low. Although likely to utilise airspace above the Project Area This species is unlikely to utilise habitat within the Project Area.
<i>Monarcha melanopsis</i>	black-faced monarch		Mi		Found along the coast of eastern Australia, becoming less common further south. The Black-faced Monarch is found in rainforests, eucalypt woodlands, coastal scrub and damp gullies. It may be found in more open woodland when migrating.	Low. No suitable habitat is present in the Project Area.
<i>Motacilla flava</i>	yellow wagtail		Mi		Species is believed to be a regular summer visitor to NSW, preferring open grassy flats near water.	Low. No suitable habitat is present in the Project Area.
<i>Myiagra cyanoleuca</i>	satin flycatcher		Mi		Found along the east coast of Australia in tall forests, preferring wetter habitats such as heavily forested gullies, but not rainforests.	Low. Marginal habitat is present in the Project Area. May be an occasional visitor to the Project Area during migration periods.
<i>Rhipidura rufifrons</i>	rufous fantail		Mi		Found in rainforest, dense wet forests, swamp woodlands and mangroves, preferring deep shade, and is often seen close to the ground.	Low. Marginal habitat is present in the Project Area. May be an occasional visitor to the Project Area during migration periods.



Scientific Name	Common Name	BC Act	EPBC Act	BioNet records (<10 km)	Habitat Requirements	Likelihood of Occurrence
<i>Actitis hypoleucos</i>	common sandpiper		Mi		Species occurs near coastlines utilising coastal and inland wetlands, streams, mudflats, lakes, claypans and reservoirs. Forages in shallow water and roosts on rocks or in roots or branches of vegetation.	None. No suitable habitat is present in the Project Area.
<i>Callidris acuminata</i>	sharp-tailed sandpiper		Mi		Species prefers muddy edges of shallow fresh or brackish wetlands with inundated or low vegetation. Known to inhabit lagoons, swamps, lakes, dams, and other waterbodies. Roosts at the edges of wetlands.	None. No suitable habitat is present in the Project Area.
<i>Calidris ferruginea</i>	curlew sandpiper		Mi		Mainly occur on intertidal mudflats in sheltered coastal areas, such as estuaries, bays, inlets and lagoons, and also around non-tidal swamps, lakes and lagoons near the coast, and ponds in salt-works and sewage farms. They are also recorded inland including around ephemeral and permanent lakes, dams, waterholes and bore drains, usually with bare edges of mud or sand. They occur in both fresh and brackish waters.	None. No suitable habitat is present in the Project Area.
<i>Callidris melanotos</i>	pectoral sandpiper		Mi		Birds forage on grasslands and mudflats, picking up food by sight, sometimes by probing. They mainly eat arthropods and other invertebrates.	None. No suitable habitat is present in the Project Area.
<i>Gallinago hardwickii</i>	Latham's snipe		Mi		Generally inhabits open, freshwater wetlands (permanent and ephemeral) with low, dense vegetation however known to occur in saline or brackish water in modified or artificial habitats.	None. No suitable habitat is present in the Project Area.
Insects						
<i>Synemon plana</i>	golden sun moth	CEC	CE		Occurs in natural temperate grassland and grassy box-gum woodlands typically dominated by wallaby grasses, spear-grasses and/or kangaroo grass.	Low. Habitat in the Project Area is unsuitable due to the highly exotic and disturbed nature.



APPENDIX B
Assessment of Significance

B.1 Five-Part Test under the *Biodiversity Conservation Act 2016*

The following Five-Part Test of Significance has been conducted in accordance with Section 7.3 of the *Biodiversity Conservation Act 2016* for threatened species, populations and communities that have the potential to occur within the Project Area (refer to **Appendix A**).

The Project Area provides foraging habitat for more mobile fauna species such as bats and birds. Roosting and breeding habitat is marginal due to the very limited number of hollows present, and no caves or other structures being present.

Therefore, this assessment of significance has been conducted on flying threatened species with potential to occur in the Project Area. These are:

- black falcon (*Falco subniger*)
- little eagle (*Hieraetus morphnoides*)
- eastern false pipistrelle (*Falsistrellus tasmaniensis*)
- eastern coastal free-tailed bat (*Micronomus norfolkensis*)
- eastern bentwing-bat (*Miniopterus schreibersii oceanensis*)

Five-Part Test of Significance

1) The following is to be taken into account for the purposes of determining whether a proposed development or activity is likely to significantly affect threatened species or ecological communities, or their habitats:

a) in the case of a threatened species, whether the proposed development or activity is likely to have an adverse effect on the life cycle of the species such that a viable local population of the species is likely to be placed at risk of extinction

The proposed activity is highly unlikely to have an adverse effect on the life cycle of any of these threatened species, such that any local population would be placed at risk of extinction. These species are all highly mobile and the Project Area is unlikely to provide high quality habitat for these species. The removal of 9.7 ha of exotic vegetation is unlikely to significantly impact upon the lifecycle of these species, especially considering the availability of similar habitat in the immediate surrounds and greater Goulburn area. These species can readily forage above the other extensive areas of similar exotic vegetation and grassland in the immediate locality.

No breeding habitat is available for the black falcon or the little eagle.

The drainage culvert in the Project Area could potentially provide roosting habitat for the three species of microbat. While it is considered unlikely that this feature would be removed as part of a future activity, this assessment has assessed the worst-case scenario, being its removal. Should this culvert be removed, it is unlikely that this would create a significant impact upon these microbat species. These species are not likely to breed in this culvert, as they typically favour caves, and therefore it would only be roosting habitat affected. While there may not be many similar culverts in the locality, these microbats are known to roost in hollows, under tree bark and in man-made structures. It is unlikely that any local populations would be placed at risk of extinction from removal of the culvert.

1) The following is to be taken into account for the purposes of determining whether a proposed development or activity is likely to significantly affect threatened species or ecological communities, or their habitats:
b) in the case of an endangered ecological community or critically endangered ecological community, whether the proposed development or activity:
i) is likely to have an adverse effect on the extent of the ecological community such that its local occurrence is likely to be placed at risk of extinction, or
Not applicable
ii) is likely to substantially and adversely modify the composition of the ecological community such that its local occurrence is likely to be placed at risk of extinction
Not applicable
c) in relation to the habitat of a threatened species or ecological community:
i) the extent to which habitat is likely to be removed or modified as a result of the proposed development or activity, and
A relatively small area of habitat (9.7 ha) is proposed to be impacted. This vegetation is not considered to be high quality for these species, given that it is exotic and situated in a highly disturbed area (historical clearance). Therefore, the removal of this relatively small area of habitat is unlikely to significantly impact upon these highly mobile threatened species, given the area of similar habitat to remain in the immediately surrounding area.
ii) whether an area of habitat is likely to become fragmented or isolated from other areas of habitat as a result of the proposed development or activity, and
The Project will not cause fragmentation or isolation of habitats. The trees within the Project Area are situated in a very isolated pocket of vegetation, which is largely surrounded entirely by cleared areas. Given that these species are highly mobile, the removal of this vegetation is unlikely to cause these species to decline in the local area, given the availability of similar resources in the immediate vicinity.
iii) the importance of the habitat to be removed, modified, fragmented or isolated to the long-term survival of the species or ecological community in the locality,
The Project will not negatively impact, either directly or indirectly, habitat that is important for the long-term survival of these threatened species. Given that the habitat is in a previously disturbed state (historical clearing) and consists of exotic vegetation, it is unlikely that the habitat to be removed is important to the survival of any of these threatened species.
d) whether the proposed development or activity is likely to have an adverse effect on any declared area of outstanding biodiversity value (either directly or indirectly)
The Project will not impact any declared areas of outstanding biodiversity value.
e) whether the proposed development or activity is or is part of a key threatening process or is likely to increase the impact of a key threatening process.
<p>The proposed activity has the potential to be part of, or increase the impact of, several KTPs:</p> <ul style="list-style-type: none"> • Anthropogenic climate change • Infection of frogs by amphibian chytrid causing the disease chytridiomycosis • Loss of hollow- bearing trees • Removal of dead wood and dead trees
Conclusion
The Project is not likely to result in a significant impact to any of the above listed threatened species.



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APA Ref: 443660

20 November 2019

Narlisa Cooper
 Laterals Planning
 PO Box 1326
 Goulburn NSW 2580

EMAIL OUT: narlisa@laterals.com.au

Dear Narlisa,

**RE: 204 Taralga Road, Goulburn
 Lot 2 on DP1171661, Lot 157 on DP821713
 Planning Proposal – Private Recreation (RE2) to Large Lot Residential (R5) Rezoning & Residential Subdivision**

Further to our recent email correspondence, APA provides the following advice to assist with your Planning Proposal and subdivision design layout for the abovementioned site.

APA Group (APA) is Australia's largest natural gas infrastructure business and has direct management and operational control over its assets and investments. APA's gas transmission pipelines span across Australia, delivering approximately half of the nation's gas usage. APA owns and operates over 15,000 km's of high-pressure gas transmission pipelines across Australia.

Gorodok Pty Limited and East Australian Pipeline Limited (**APA**) own and operate two pipelines that run in parallel north of the Goulburn Town Centre. The two pipelines are located within a 24.385 wide shared easement through subject Lot 157 on DP821713 (see Table 1 for details):

Table 1: Transmission gas pipelines in the area of consideration

Pipeline	Pipeline Licence	Easement Width (m)	Diameter (mm)	Measurement Length (m)
Moomba – Sydney Ethane Pipeline	15	24.385	200	600
Moomba – Wilton Natural Gas Pipeline	16		850	675
Note: measurement length is applied to either side of the pipeline.				

APA's Role

As a Licensee under the *Pipelines Act 1967*, APA is required to operate pipelines in a manner that minimises adverse environmental impacts and protects the public from health and safety risks resulting from operation of our high pressure gas transmission pipelines (**HPGTP**). Once a HPGTP is in place, APA is required to constantly monitor both the pipeline corridor and also a broader area within which we are required to consider land use changes and development and to assess what such changes means to the risk profile of the HPGTP.

APA has a number of responsibilities and duties to perform under a complex framework of legislation, standards and controls across Federal, State and Local Government landscapes. In particular, the *Pipelines Act 1967*, cites Australian Standard 2885 (**AS2885**) as a mandatory safety standard for the design, construction, operation and maintenance of transmission pipelines. In discharging our

APA Group comprises two registered investment schemes, Australian Pipeline Trust (ARSN 091 678 778) and APT Investment Trust (ARSN 115 585 441), the securities in which are stapled together. Australian Pipeline Limited (ACN 091 544 704) is the responsible entity of those trusts. The registered office is HSBC building, Level 19, 580 George Street, Sydney NSW 2000.

Page 1 of 4

energy. connected.

regulative responsibilities, APA needs to continuously review what is happening around its assets, what land use changes are occurring and what development is taking place to ensure it remains in a position to comply with applicable operational and safety standards and legislation whilst meeting its commercial obligations and imperatives.

Pipeline Risk Profile and the Measurement Length

In managing HPGTP's and considering land use changes, APA must focus on that area geographically defined by AS2885 as the Measurement Length (**ML**). The ML area is the heat radiation zone associated with a full-bore pipeline rupture. APA is mandated to consider community safety in the ML due to the high consequences of pipeline rupture to life, property and the economy.

The ML is determined by the pipeline diameter and the Maximum Allowable Operating Pressure (**MAOP**) of the pipe. APA must consider any changes of land use within the ML area to determine the effect of a new use on the risk profile of the pipeline.

For reference, the ML of the Moomba – Sydney Ethane Pipeline is 600m and Moomba to Wilton Natural Gas Pipeline is 675m. The greatest ML applies in this instance. Note that the ML is a radial dimension, and therefore applies to both sides of the pipeline.

Sensitive Uses

APA seeks to limit sensitive uses from establishing within the ML so as to retain a high level of compliance with applicable safety standards. AS2885 defines a sensitive use as one which may increase the consequences of failure due to its use by members of the community who may be unable to protect themselves from the consequences of a pipeline failure.

To this end, APA's preferred position is that all land uses listed below be located outside of the ML:

- Child care centres
- Detention facility
- Educational facility
- Function facility
- Health care services
- Hospital
- Hotel
- Place of worship
- Residential care facility
- Retirement facility
- Service station
- Shop
- Shopping centre
- Theatre

Safety Management Study

AS2885 requires a Safety Management Study (**SMS**) to be undertaken whenever the land use classification of land within the ML. The purpose of an SMS is to assess the risk associated with a change in land use, including both construction risks and ongoing land use risks. The SMS will also develop appropriate controls to reduce risks to 'as low as reasonably practicable' (**ALARP**).

The cost of undertaking an SMS including any mitigation measures required are to be borne by the proponent as the 'agent of change'. APA has developed a list of preferred SMS facilitators. This ensures facilitators are both independent and satisfactorily qualified to undertake this assessment. This list is available from APA on request. Mitigation measures may include slabbing of the pipeline, additional signage, marker tape, and controls during construction.

The SMS process does not preclude development from occurring, but ensures it occurs in a manner which maintains the pipeline integrity and community safety.

The current primary location class for both APA pipelines at the subject location is **Residential (T1)** and will not change as a result of the development proposal. Accordingly, a SMS is **not** required to be undertaken in this instance.

Easement Management

APA's pipelines and associated easement (24.385m width) are located on a south-east alignment through the centre of Lot 157 on DP821713. The following details regarding easement management are therefore provided for general information.

To ensure compliance with the safety requirements of AS2885, APA needs to ensure our easement is managed to an appropriate standard. This includes:

- Ensuring the easement is maintained free of inappropriate vegetation and structures.
- Place warning signs at various mandated points along the pipeline route, including any change in property description/boundaries.
- Maintain a constant line of sight between warning signs.
- Undertake physical patrols and inspections of the easement.

APA will not accept outcomes that do not enable us to achieve our safety responsibilities to the surrounding community. Crossing of the pipelines should be at 90 degrees and minimised as much as possible.

Any proposed works within the easement must be approved prior to works occurring, by APA through our Third Party Works Authorisation process. This process will ensure all works are undertaken in a safe manner that does not physically impact on the pipeline. Anyone seeking to undertake works on property containing a pipeline, or are seeking details on the physical location of the pipeline, please contact Dial Before You Dig on 1100 or <https://www.1100.com.au/> or APA directly at APAProtection@apa.com.au.

Proposed Development

The details of the proposed residential subdivision, which form the basis for this letter, are shown on Laterals Planning Subdivision Plan: Issue No. A, dated 7 November 2019.

Planning Proposal and Future Residential Subdivision

It is understood the Planning Proposal seeks to amend the Goulburn Mulwaree Local Environmental Plan 2009 to rezone the above land from its current zoning of Private Recreation (RE2) to Large Lot Residential (R5). This rezoning will enable residential subdivision to occur on the site with a minimum lot size of 2,000m². Similar, to what has occurred, at the corner of Taralga Road and Racecourse Drive.

The proposed development is for reconfiguration of 1 lot into 15 residential lots generally in the range of 1,999m² to 3,159m² in size and balance lot (16 – 5.5ha). All proposed lots are located within the ML of the two APA pipelines, with proposed lots 1-4 to be located over APA's pipeline easement containing the Moomba to Sydney Ethane Pipeline and Moomba to Wilton Natural Gas Pipeline. The reconfiguration plan does not include building envelopes which should be identified clear of APA's pipeline easement.

Subdivision Plan Layout and Pipeline Easement Treatment

APA seeks to avoid any reconfiguration which fragments the pipeline easement to ensure APA continues to have line of sight and the pipeline is retained in an environment that best facilitates its management and ongoing integrity. In review of the proposal, it is noted that proposed lots 1-4 will result in this undesired outcome. APA's preferred development outcome is our pipeline is located within a linear open space corridor, with limited embellishment held in single title. Ideally, this would have road abutting as is traditional with open space outcomes.

With respect to the subdivision plan, this can be best achieved by incorporating APA's pipeline easement with proposed Lot 16 (5.5ha).

Pipeline Crossings

It is expected the proposed subdivision will require driveway crossovers / service crossings over APA's easement to connect proposed lots 1-4 to the external road network. All crossings of the pipeline should be as close to 90 degrees and minimised as much as possible.

Any new road crossings of APA's pipeline easement must achieve a minimum cover of 1200mm depth and the pipeline is to be slabbed for the width of the road reserve, at the proponent's cost. APA has a suite of standard drawings to assist in detailed design. These drawings are available upon request.

APA's Pipeline Exact Location and Depth Confirmation

Pot holing must be carried out by the Applicant to identify the exact location and depth of the pipeline. This can be achieved through the Applicant completing a Dial Before You Dig on 1100 or contacting APA directly at APAprotection@apa.com.au.

Construction Methodology

Details of construction equipment, construction vehicles (including TARE weights) and works methodology will need to be submitted to APA for approval in a Construction Management Plan format.

Proposal Plans and Pipeline Easement Notation

While the plans reference APA's pipeline easement ('Gas Lines'), it is not clearly marked as being for a high pressure gas transmission pipeline. The level of risk associated with any intrusion of the pipeline is not adequately communicated to those undertaking site works. The APA Moomba to Sydney Ethane Pipeline and Moomba to Wilton Natural Gas Pipeline should be clearly identified as high pressure gas transmission pipelines on all relevant plans.

APA's pipeline easement should be clearly marked as being for a high pressure gas transmission pipeline easement. This is to ensure the level of risk associated with any intrusion into the easement is adequately communicated to those undertaking future site works. The easement should be clearly identified as an easement for a high pressure gas transmission pipeline on all relevant plans. In addition the easement should be hatched and notated as 'no works to occur without the prior authorisation of the pipeline operator'.

Comments

As more details of the proposal becomes available, APA would be happy to provide further advice. APA would also need to be notified of the proposal if progressed, during the Development Assessment Process in accordance with Clause 66C, SEPP (Infrastructure) 2007.

Please contact me on 07 3223 3385 or planningnsw@apa.com.au should you wish to discuss the contents of this correspondence.

Yours faithfully,



Ben Setchfield
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TRAFFIC IMPACT ASSESSMENT

204 TARALGA ROAD GOULBURN NSW 2580

Proposed Re-Zoning

Prepared for:	Laterals Planning
Date Prepared:	November 2019
Revision:	1.0
Goulburn Mulwaree Council Application #:	T.B.A.



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INTRODUCTION

Solution 1 Traffic Engineers were engaged by Laterals Planning to prepare a Traffic Impact Assessment for a proposed rezoning at 204 Taralga Road, Goulburn, NSW 2580.

This report will assess the implications of the proposed development on existing traffic, parking and transport conditions surrounding the site. The following items have been included in the subsequent sections of this report:

- Public transport service accessibility at the site;
- A traffic impact assessment of the traffic generated by the proposed development.
- Parking demand assessment of the proposed development.

During the course of preparing this assessment, the subject site and its environment have been inspected, and all relevant traffic and parking data collected and analysed.

BACKGROUND AND EXISTING CONDITIONS

Location and Land Use

The subject site is currently vacant land zoned as a recreation zone. The proposed development is to develop the northern half of the site for residential blocks after the rezoning has been approved by council. The southern half will remain a reserve. There will be 15 blocks of approximately 2000m² in area each.

The subject site is located at 204 Taralga Rd with the main frontage to Taralga Rd. The site is situated along the western side of Taralga Rd and it is located in an area designated by the Goulburn Mulwaree Council as private recreational (RE2) and (E3) environmental management zones.

The following sections of this report will outline the effects on the existing traffic conditions and public parking demand arising from the proposed development.

Figure 1: shows the map location of the subject site on a street map.

Figure 2: presents an aerial photograph of the subject site.

Figure 3: shows a street view of the site as seen from Taralga Rd.

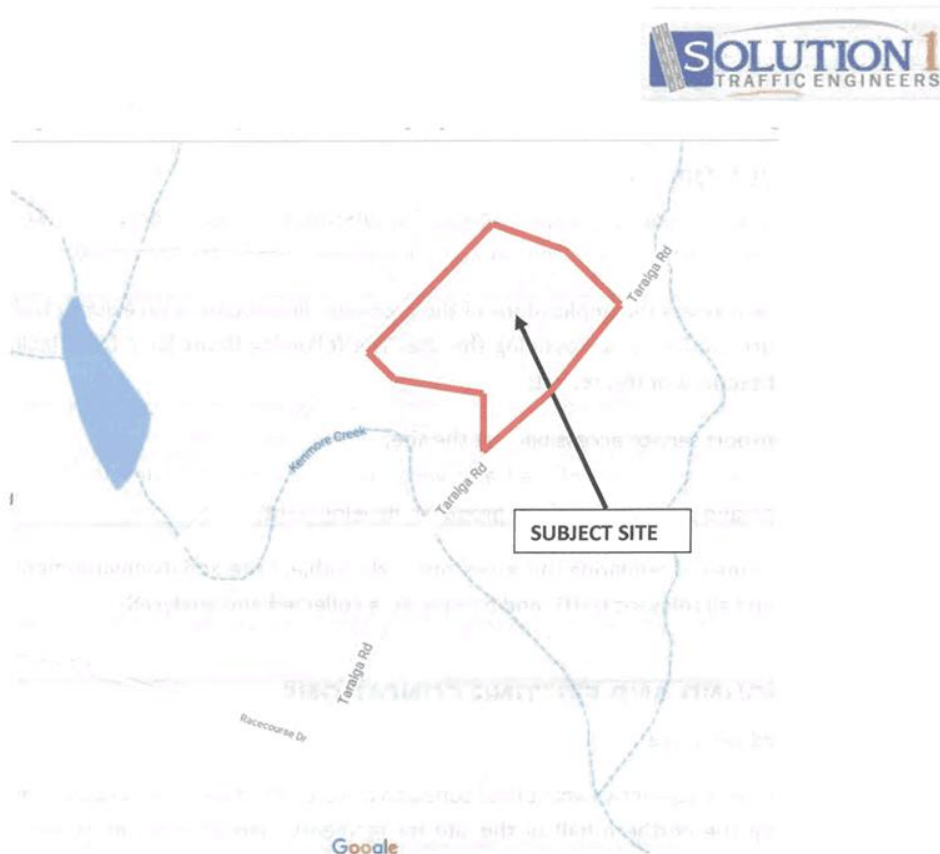


Figure 1: Location of the subject site on a street map



Figure 2: Aerial view of the subject site

204 Taralga Rd, Goulburn NSW 2580

4

by Solution 1 Traffic Engineers

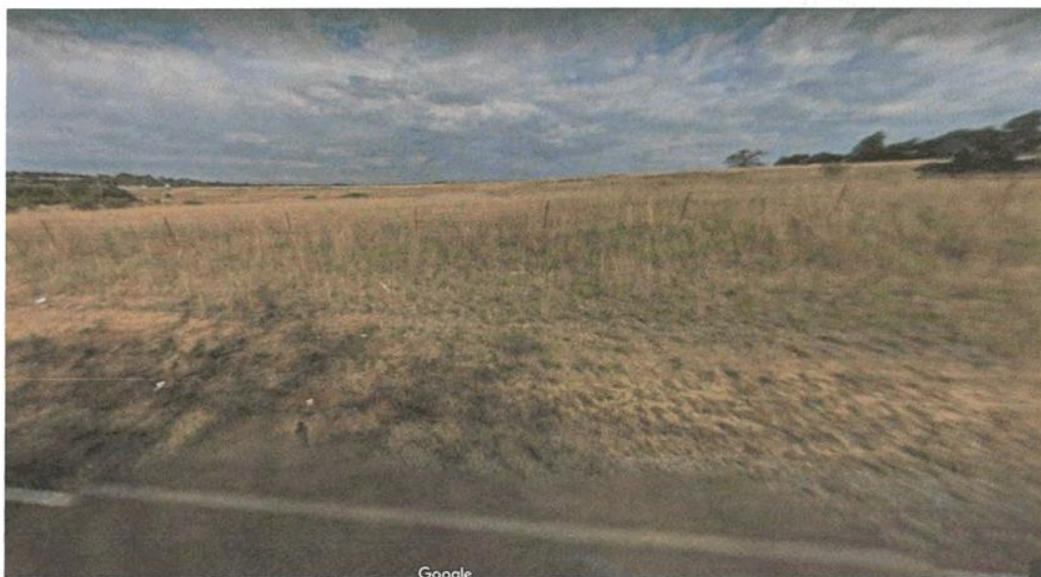


Figure 3: Street view of the site from Taralga Road



PUBLIC TRANSPORT

Train Services

The subject site is located in an area that has direct access to infrequent train services on the Intercity Line 631 from Sydney Central to Canberra, which stops at Goulburn Station and which has two successive connecting buses on route 823 and route 821A. Bus route 821A stops at Rex St/Taralga Rd within a 1.3 km or 19 minute walk to the site. Figure 4 below shows a route map of the intercity train line 631.



Figure 4: Route map of Intercity train line 631 from Sydney to Goulburn Station

Table 1 below shows the Intercity train line 631 Service Details.

Table 1: Public Transport – Intercity Line 631 Service Details

TRAIN LINE	STOP LOCATION	DISTANCE FROM NEAREST BUS STOP TO SITE (km)	WALK TIME BUS STOP TO SITE (mins)	ORIGIN	DESTINATION	TRAIN FREQUENCY (mins) 7 am to 9 pm
Intercity 631	Goulburn Station	1.3km	19 mins.	City	Canberra	Mon-Fri: 170 mins.
Intercity 631	Goulburn Station	1.3km	19 mins.	Canberra	City	Mon-Fri: 170 mins.
Intercity 631	Goulburn Station	1.3km	19 mins.	City	Canberra	Sat/Sun: 170 mins.



Bus Services

Figure 5 below shows a map of the walk from bus route 821A stop to the site.



Figure 5: Map of 1.3km walk from bus stop route 821A to the site

Table 2 below shows the bus route 821A service details.

Table 2: Public Transport – Bus Route 821A Service Details

BUS ROUTE	STOP LOCATION	DISTANCE FROM NEAREST BUS STOP TO SITE (m)	WALK TIME BUS STOP TO SITE (mins)	ORIGIN	DESTINATION	BUS FREQUENCY (mins) 8 am to 12 pm
821A	Rex St/Taralga Rd	1.3km	19 mins.	Goulburn Station	West Goulburn	Mon-Fri: 71 mins.
821A	Rex St/Taralga Rd	1.3km	19 mins.	West Goulburn	Goulburn Station	Mon-Fri: 71 mins.
821A	Rex St/Taralga Rd	1.3km	19 mins.	Goulburn Station	West Goulburn	Sat: 75 mins.

The above train and bus service details show that there are infrequent train services between the City and Goulburn Station, where the connecting bus route 821A which stops at Rex St Taralga Rd, within a 1.3 km walk or 19 minute walk to the site. The bus service only operates Monday to Saturday from 8am to 12pm. Currently the site has poor public transport access.

The future residents would have very limited choice for using public transport instead of driving to and from the site.



PROPOSED DEVELOPMENT

The proposal relates to the rezoning of the northern part of the site to enable a subdivision of the land into 15 residential blocks each of approximately 2000m² in area.

A site plan for the proposed development is attached in Appendix A.

The site is currently zoned as private recreation zone (RE2) and environmental management zone (E3) in the Goulburn Mulwaree Council Planning Scheme.

It is proposed to provide vehicle access to the residential blocks through a new cul de sac road from Taralga Rd. The road will be designed to provide two way access to the blocks with a turning head at the end of the cul de sac, so no reverse manoeuvre is required on to Taralga Rd.



CAR PARKING ASSESSMENT

The Goulburn Mulwaree Council DCP 2009, Table 3.2, parking requirement

From the Goulburn Mulwaree Council DCP 2009, Table 3.2, the minimum parking requirement for a dwelling house development is given at a rate of 1 space for every dwelling. As the proposed development will have only 15 dwellings, the Council DCP parking requirement is a minimum of 15 spaces in total.

As the proposed development is in an early stage, the final total number of spaces proposed would be determined at the detailed design stage of the dwellings but it will comply with the Goulburn Mulwaree Council DCP 2009, Table 3.2, parking requirement.



TRAFFIC IMPACTS OF THE PROPOSED DEVELOPMENT

The proposed development at the subject site includes the subdivision of the site into 15 residential blocks each of approximately 2000m² in area.

A site plan for the proposed development is attached in Appendix A.

The recommended trip generation rate for dwelling houses in the NSW RTA Guide to Traffic Generating Development (2002) document is given below:

Daily trip rate is = 9 trips per dwelling.

The peak hour trip rate is = 0.85 trips per dwelling.

For 15 proposed dwellings, the daily trip rate is = $9 \times 15 = 135$ vehicle trips per day. Spread over a 12 hour day this equivalent to $(135/12) = 11$ trips per hour, which equate to 1 vehicle trip every 5 minutes.

The peak hour trip rate is = $0.85 \times 15 = 13$ trips per hour, which equate to 1 vehicle trip every 5 minutes.

With such low trip rates, it is considered that the traffic impact on to Taralga Rd would be insignificant.

These are very low trip rate compared to the existing traffic flow on Taralga Rd and the surrounding streets and it will have no significant effect on traffic volumes on the existing streets.



CONCLUSIONS

The proposed development consists of 15 residential blocks. It will provide a minimum of 15 parking spaces as required by the Goulburn Mulwaree Council DCP 2009 parking requirement for dwellings.

There are infrequent train services from Sydney City to Goulburn Station, which also has infrequent connecting buses stopping within a 1.3km or a 19-minute walk to the site. There is infrequent and limited public transport in the vicinity of the proposed development and this will not reduce the need for driving for the future residents and their visitors.

The assessment of the expected peak hour vehicular traffic generation for the proposed development from the RTA NSW Guide reveals very low levels of vehicular traffic at 13 trips in the peak hour, which is equivalent to 1 trip every 5 minutes. The daily traffic generation was assessed as 135 vehicle trips per day, which equate to 1 vehicle trip every 5 minutes also. This low level of trips generated by the proposed development would have no significant effect on the traffic on Taralga Rd or on the nearby roads.

In conclusion, this study indicates that the proposed rezoning of the site for a residential subdivision use is not expected to have adverse impacts on the surrounding traffic conditions and public parking provided. The parking requirements for the proposed development can conveniently be accommodated by the on-site parking for a minimum of 15 spaces, which meets the Goulburn Mulwaree Council DCP 2009 parking requirement.

Therefore, based on the assessment presented in this report, it is considered that the proposed development will have a less than minor effect on the existing traffic in the surrounding roads and very little to no effect on the on-street parking in the vicinity of the site.



APPENDIX A: PROPOSED SITE PLAN



Project Name		Project No.		Project Date	
204 Taralga Rd, Goulburn NSW 2580		100		10/04/2020	
Client Name		Client No.		Client Date	
Goulburn Mulwaree Council		100		10/04/2020	
Project Description		Project No.		Project Date	
Subdivision Plan		100		10/04/2020	
Lateral Planning		100		10/04/2020	
Scale		1:1250		10/04/2020	
Author		100		10/04/2020	
Check		100		10/04/2020	
Date		10/04/2020		10/04/2020	
Project Name		Project No.		Project Date	
204 Taralga Rd, Goulburn NSW 2580		100		10/04/2020	
Client Name		Client No.		Client Date	
Goulburn Mulwaree Council		100		10/04/2020	
Project Description		Project No.		Project Date	
Subdivision Plan		100		10/04/2020	
Lateral Planning		100		10/04/2020	
Scale		1:1250		10/04/2020	
Author		100		10/04/2020	
Check		100		10/04/2020	
Date		10/04/2020		10/04/2020	

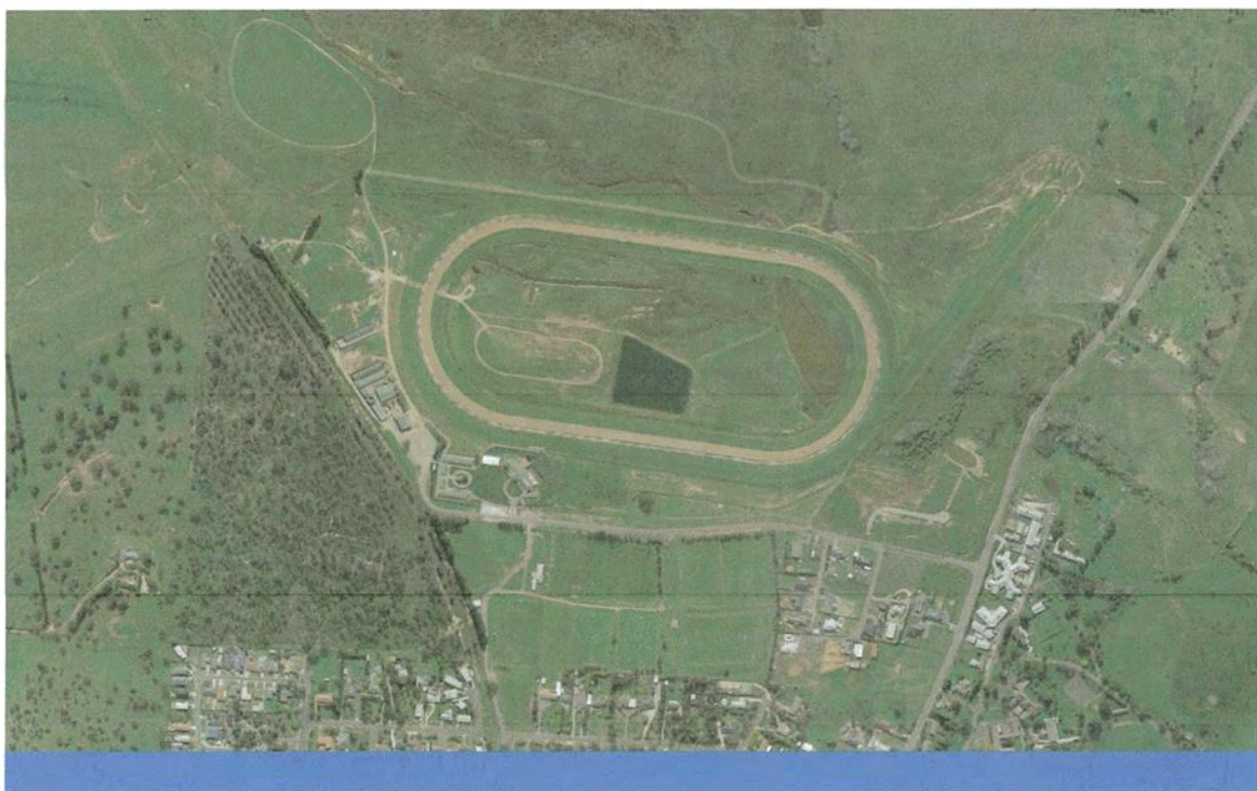
204 Taralga Rd, Goulburn NSW 2580

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by Solution 1 Traffic Engineers

Goulburn Race Club – Flood Study

GOULBURN RACE CLUB
FLOOD STUDY
Final Report



December 2019



Goulburn Race Club – Flood Study



Goulburn Race Club

Flood Study

Project: Goulburn Race Club – Flood Study
Project Number: 190049
Client: Laterals Planning
Report Author: Nicola De Paolis, Zac Richards
Verified by: Zac Richards

Date	Version	Description
23-October-2019	1	Draft Report
11 – December -2019	2	Final Report

Filepath: J:\190049\Admin\Report\FINAL\Goulburn Race Club – Flood Study.docx

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Cover image: Satellite picture of Goulburn Race Club (Google Earth)

Goulburn Race Club – Flood Study

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Report Images

Image 1: Goulburn Race Club – Site Location

Image 2: Catchment Area

Image 4: Design rainfall information obtained from the BoM

Image 5: WBNM 5%AEP hydrologic model design flows at the site

Image 6: WBNM 1%AEP hydrologic model design flows at the site

Report Figures

Figure 1: 1% AEP event – flood depths and levels

Goulburn Race Club – Flood Study

EXECUTIVE SUMMARY

Introduction

GRC Hydro have been appointed by Laterals Planning to undertake a flood study for the Goulburn Race Club. The Race Club is located approximately 4.5 km north-east of the town centre of Goulburn. A rezoning application is proposed for a lot to the east of the Race Club.

Hydrology

Hydrologic modelling has been undertaken using WBNM, with design flows derived for the site for the 1% and 5% AEP events. The hydrological model applied calibrated loss parameters obtained from the Wollondilly and Mulwaree Rivers Flood Study (2016). Validation of the derived design flow estimates has been undertaken via comparison to ARR2016 Regional Flood Frequency Estimates (RFFE). A joint probability approach was implemented whereby the coincidence of Kenmore Creek and Wollondilly River flooding was considered.

Hydraulics

A TUFLOW hydraulic model was constructed for the site on a 2 m grid resolution. Upstream and internal boundary conditions were applied based on outputs from the WBNM model, and static Wollondilly River tailwater levels obtained from the Council Flood Study (2016) were applied at the downstream boundary. Mannings values consistent with the Council Flood Study (2016) have been applied.

Results

A flood map for the 1% AEP event was developed which present peak flood depths and levels.

Goulburn Race Club – Flood Study

1. INTRODUCTION

GRC Hydro have been appointed by Laterals Planning to undertake a flood study for the Goulburn Race Club. The Race Club is located approximately 4.5 km north-east of the town centre of Goulburn. A rezoning application is proposed for a lot to the east of the Race Club (the site). Image 1 presents the site and proximate water courses

Image 1: Goulburn Race Club – Site Location



The site is traversed by Kenmore Creek which is an intermittent water course that flows through the site from west to east. Flow arrives to the site from two flow paths via culverts through a manmade embankment within the racecourse and exits the site via box culverts under Taralaga Road. The site is also situated on the Wollondilly River floodplain, with parts of the site flood liable during a 1% AEP Wollondilly River flood.

1.1 Objectives

The objective of this study is to define 1% AEP event flood behaviour at the site due to Kenmore Creek and the Wollondilly River. Flood behaviour has been presented as flood depths and levels.

1.2 Previous Studies

No existing flood study is available for the site. The Wollondilly and Mulwaree Rivers Flood Study (the Council Flood Study, WMAwater, 2016) was undertaken on behalf of Goulburn Mulwaree Council for the township of Goulburn, however only examines riverine flooding and does not provide flood information for Kenmore Creek. Notwithstanding, flood level information from the Council Flood Study (2016) has been used to inform Wollondilly River flood levels, as well as to provide calibrated model parameters for implementation in the current study. Further details are presented in Sections 2 and 3 of this report.

2. HYDROLOGY

2.1 Catchment Description

Kenmore Creek at the site has a catchment area 14 km², with ground level elevations ranging between 625 and 870 mAHD. The catchment is predominantly rural in nature with some urban development present to the south and southwest of the site. The Kenmore Creek catchment area is presented in Image 2.

Image 2: Catchment Area



2.2 Hydrologic Modelling

The hydrologic aspects of this study have been undertaken using WBNM. WBNM is a software program used to simulate runoff hydrographs at defined points throughout a watershed based on a set of catchment characteristics and specific rainfall events. The software is suitable for use in both rural and urban catchments, making it suitable for use in the current study.

Goulburn Race Club – Flood Study

There is no stream gauge present within the Kenmore Creek catchment and accordingly, event base model calibration was not possible. However, calibrated model parameters obtained from the Council Flood Study (2016) have been applied. It is assumed that due to the Kenmore Creek catchment being situated in the Wollondilly River catchment, model parameters in both catchments will be relatively consistent. In lieu of suitable calibration data, validation of the derived design flow estimates has been undertaken via comparison of design flows to ARR2016 Regional Flood Frequency Estimates (RFFE).

The following sections discuss the WBNM model build, model parameters, design flow results and flow validation.

2.2.1 WBNM Hydrologic Model Build

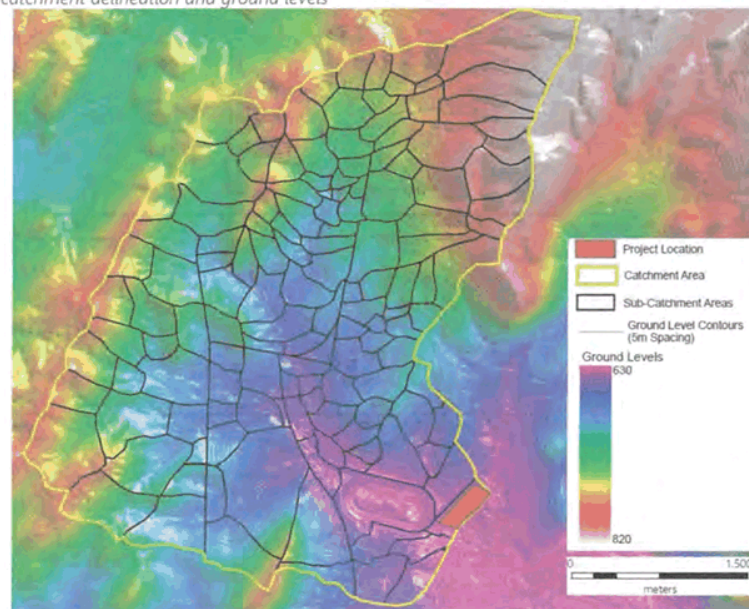
2.2.1.1 Model Schematisation and Parameters

The WBNM hydrologic model requires the derivation of sub-catchment areas and associated catchment characteristics. The catchment described in Section 2.1 was divided into 140 sub-catchments with comparable surface area, shape and ground slopes characteristics. The sub-catchment layout is presented in Image 3.

The current study has applied WBNM model parameters from the Council Flood Study (2016). Details of the applied WBNM parameters are presented below:

- The non-linearity parameter 'm' has been set as default (0.77), which is in agreement with ARR guidelines; and
- The routing parameter 'C' was set to be 1.2 which was determined via event-based calibration and validation to flood frequency analysis.

Image 3: Sub-catchment delineation and ground levels



Goulburn Race Club – Flood Study

2.2.1.2 Rainfall Losses

An Initial and Continuous Loss (IL / CL) model was implemented. Continuing Losses determined via calibration undertaken as part of the Council Flood Study (2016) were applied. Initial Losses were obtained from the ARR2016 datahub and adjusted to account for median pre-burst depths obtained from ARR2016. Applied rainfall losses presented in Table 1.

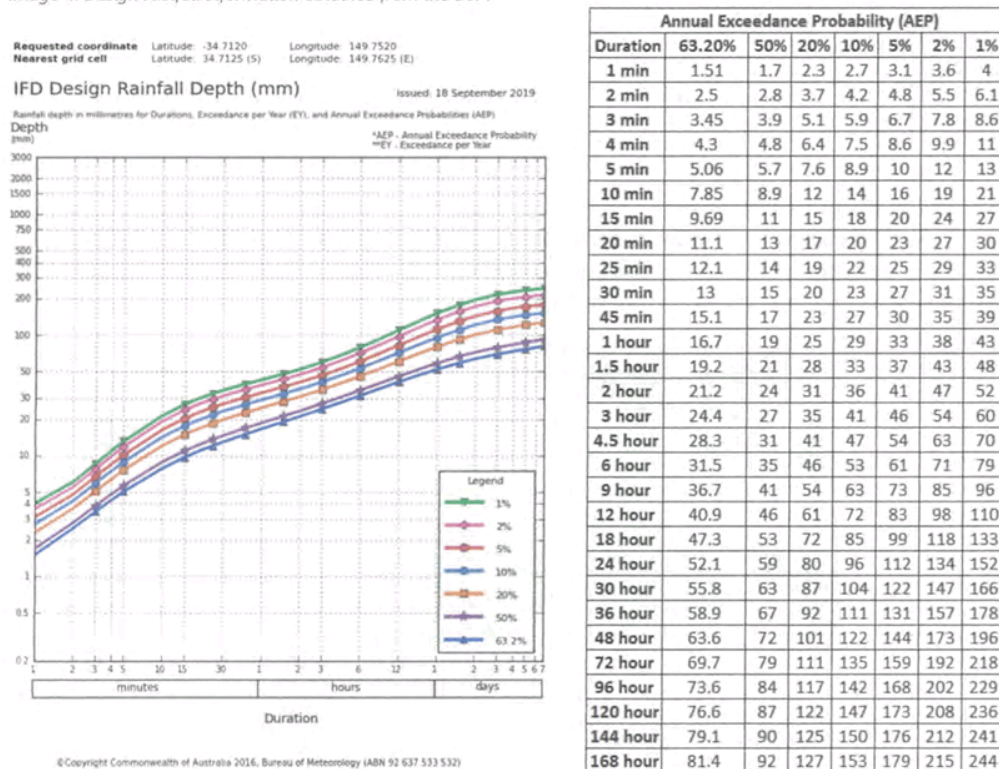
Table 1: Initial and Continuous Losses

AEP	IL (mm)	CL (mm/hr)
5%	16	2
1%	16	2

2.2.1.3 Design Rainfall

ARR2016 design rainfall depths for various durations were obtained from the Bureau of Meteorology (BoM). Details are presented in Image 4 and Attachment A.

Image 4: Design rainfall information obtained from the BoM



The recommended ARR2016 ensemble approach to applying temporal patterns has been utilised in the current study. The ensemble approach to flood modelling applies a suite of 10 different temporal patterns for each duration. The temporal patterns were obtained from ARR2016 for the 'Murray-Darling Basin' region and applied using the WBNM software.

Goulburn Race Club – Flood Study

2.2.1.4 Areal Reduction Factor

An Areal Reduction Factor (ARF) was applied to rainfall depths to adjust for the catchment's areal average rainfall intensity. The ARF was determined following the methods outlined in ARR2016.

2.2.2 Joint Probability

Simultaneous flooding of the Wollondilly River and Kenmore Creek can lead to exacerbation of flood levels. However, the coincidence of flooding of these two water courses is weakly correlated and accordingly, a joint probability model was developed with consideration of the semi-dependency of the systems. The current study has implemented the approach outlined below:

- Assess the 1% AEP flood in Kenmore Creek with a 5% AEP flood in the Wollondilly River; and
- Assess the 5% AEP flood in Kenmore Creek with a 1% AEP flood in the Wollondilly River.

The 1% AEP results for the site were defined as the peak flood envelope created from the above results.

2.3 Hydrologic Model Results

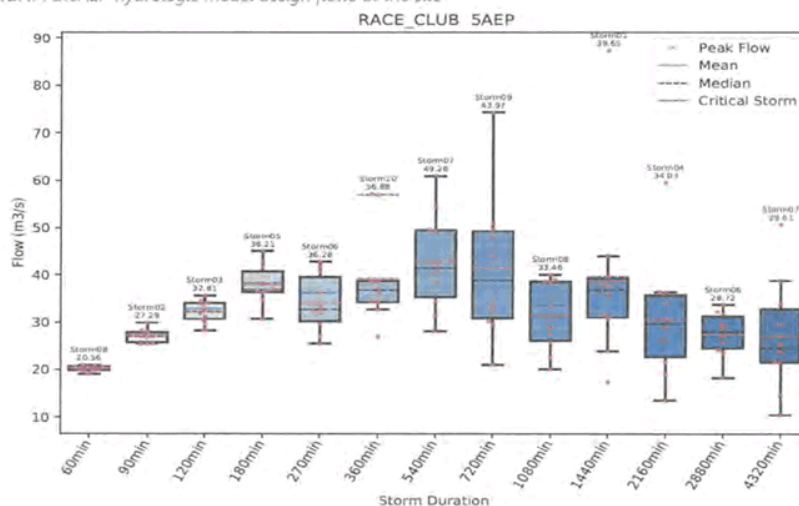
Design flows (Average Ensemble Flow) for each event at the site are presented in Table 2, along with the Critical Duration and Critical Storm Number. The Critical Storm Flow is the peak flow associated with the Critical Storm and is the flow that has been applied to the TUFLOW hydraulic model.

Table 2: Hydrologic model results

AEP (%)	Critical Duration (hours)	Average Ensemble Flow (m ³ /s)	Critical Storm Number	Critical Storm Flow (m ³ /s)
5	9	43	Storm 7	49
1	12	64	Storm 6	68

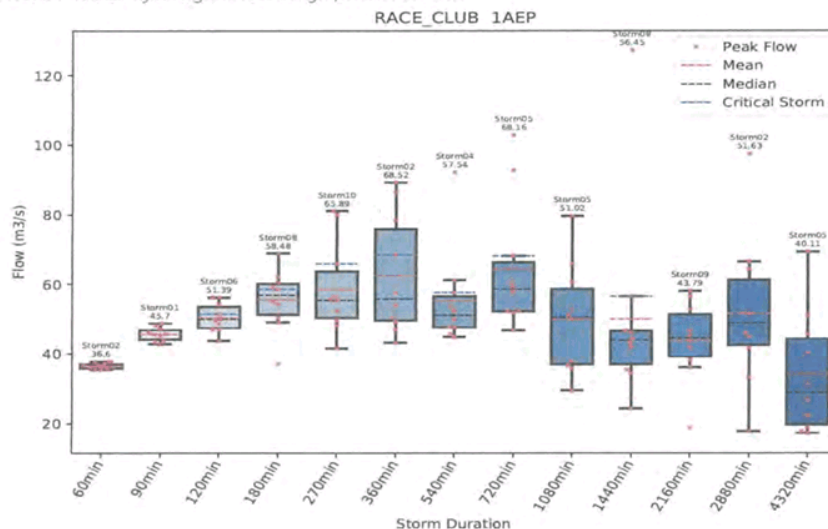
The temporal pattern ensemble results extracted from the WBNM model are presented in Image 5 and 5.

Image 5: WBNM 5%AEP hydrologic model design flows at the site



Goulburn Race Club – Flood Study

Image 6: WBNM 1%AEP hydrologic model design flows at the site



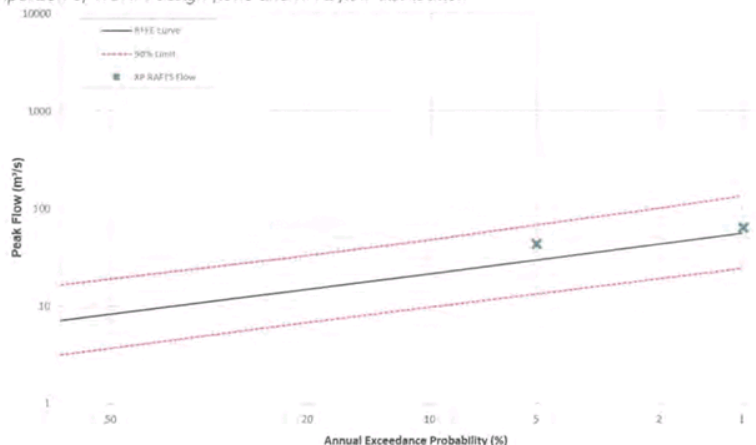
2.3.1 Design Flow Validation

2.3.1.1 Comparison to RFFE

ARR2016 Regional Flood Frequency Estimation (RFFE) design flow estimates were obtained from <https://rffe.arr-software.org/>. The RFFE model has been developed as part of ARR2016 for the estimation of flows on ungauged small to medium sized rural catchments. The results of the RFFE for the catchment to the site are presented in Attachment C.

A comparison of XP-RAFTS flows to RFFE design flow estimates has been made with the results presented in Image 7 on a discharge frequency plot. The analysis indicates that the XP-RAFTS and RFFE design flow estimates are comparable, with the XP-RAFTS flow being higher than RFFE estimates for the 5% and 1% AEP events. The results improve the robustness of the XP-RAFTS design flow estimates.

Image 7: Comparison of WBNM design flows and RFFE flow distribution



3. HYDRAULICS

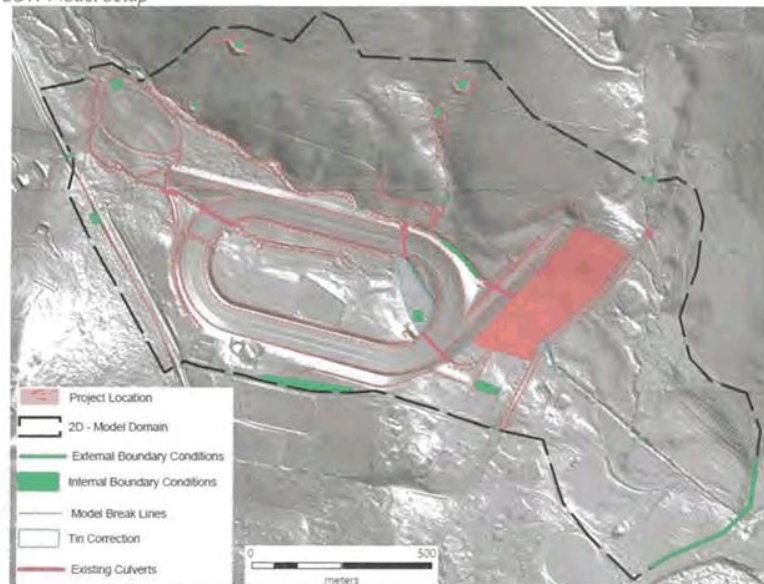
3.1 Hydraulic Model Setup

A TUFLOW hydraulic model was constructed for the site. TUFLOW is 2D numerical modelling package which is suitable for creeks and floodplains such as those impacting the site.

Various data and parameters implemented in the TUFLOW model are discussed below with the model schematisation presented in Image 8 :

- Model Domain and Grid Size – The hydraulic model domain covers an area of 170 ha, extending from ~1.5 km upstream the site to ~0.75 km downstream. A model grid size of 2 m x 2 m was implemented. This grid resolution is adequate to model all key hydraulic characteristics at the site.
- Digital Elevation Model (DEM) – The 1 m DEM ('Goulburn201107-LID1-AHD' dataset) has been used to inform the topography of the 2D hydraulic model.
- Mannings Roughness – Mannings values were selected based on inspection of aerial imagery. Mannings values consistent with the Council Flood Study (2016) have been applied. The Mannings values are within the ranges outlined in ARR2019.
- Boundary Conditions – Flow hydrographs extracted from the WBNM model have been applied as 'Upstream Boundary Condition' or applied inside the 2D domain as 'Internal Boundary Conditions'. The downstream model boundary was applied as Wollondilly River flood levels obtained from the Council Flood Study (2016).
- Break Lines – Roads, embankments and channels are hydraulic features that can have a significant impact on flood behaviour. Such features have been represented in the model by break lines with crest and invert heights determined by analysis of the DEM;

Image 8: TUFLOW Model Setup



Goulburn Race Club – Flood Study

3.2 Hydraulic Model Results

Design flood depths and levels for the 1% AEP are presented in Figure 1. Design flood levels are predominately influenced by Wollondilly River flood levels.

4. CONCLUSIONS

GRC Hydro have been appointed by Lateral Planning to undertake a flood study for the Goulburn Race Club. The Race Club is located approximately 4.5 km north-east of the town centre of Goulburn. A rezoning application is proposed for a lot to the east of the Race Club (the site).

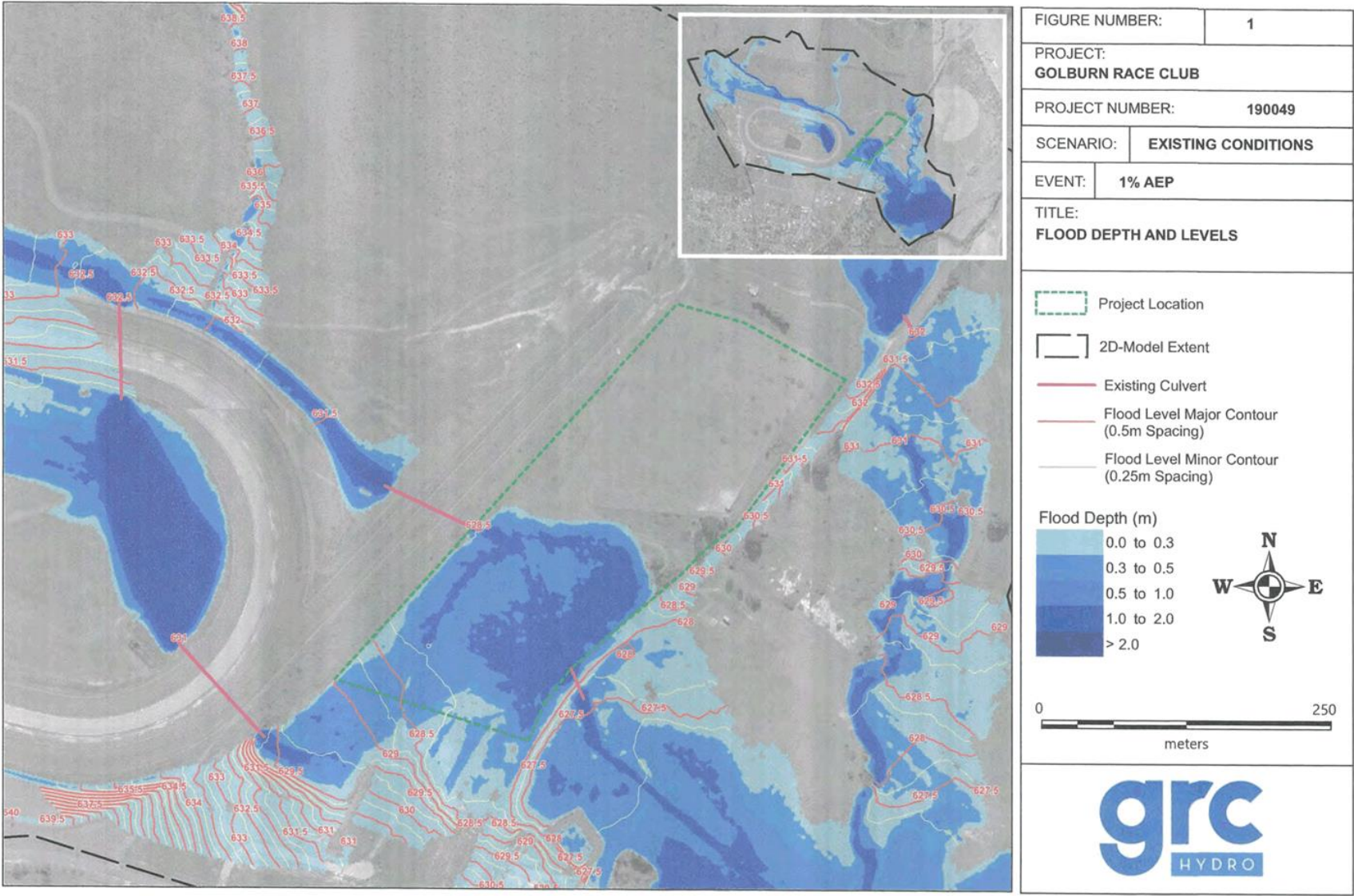
Hydrologic modelling has been undertaken using WBNM, with design flows derived for the site for the 1% and 5% AEP events. The hydrological model applied calibrated loss parameters obtained from the Wollondilly and Mulwaree Rivers Flood Study (2016). Validation of the derived design flow estimates has been undertaken via comparison to ARR2016 Regional Flood Frequency Estimates (RFFE). A joint probability approach was implemented whereby the coincidence of Kenmore Creek and Wollondilly River flooding was considered.

A TUFLOW hydraulic model was constructed for the site on a 2 m grid resolution. Upstream and internal boundary conditions were applied based on outputs from the WBNM model, and static Wollondilly River tailwater levels obtained from the Council Flood Study (2016) were applied at the downstream boundary. Mannings values consistent with the Council Flood Study (2016) have been applied.

A flood map for the 1% AEP event was developed which present peak flood depths and levels.

Goulburn Race Club – Flood Study

FIGURES



Goulburn Race Club – Flood Study

ATTACHMENT A – IDF DESIGN RAINFALL DEPTHS

11/10/2019

Rainfall IFD Data System: Water Information: Bureau of Meteorology



Location

Label: Not provided

Latitude: -34.712 [Nearest grid cell: 34.7125 (S)]

Longitude: 149.752 [Nearest grid cell: 149.7625 (E)]

IFD Design Rainfall Depth (mm)

Issued: 11 October 2019

Rainfall depth for Durations, Exceedance per Year (EY), and Annual Exceedance Probabilities (AEP).

[FAQ for New ARR probability terminology](#)

Duration	Annual Exceedance Probability (AEP)						
	63.2%	50%#	20%*	10%	5%	2%	1%
1 min	1.51	1.70	2.30	2.71	3.10	3.63	4.03
2 min	2.50	2.78	3.65	4.23	4.79	5.51	6.06
3 min	3.45	3.85	5.09	5.92	6.73	7.76	8.55
4 min	4.30	4.82	6.42	7.50	8.55	9.92	11.0
5 min	5.06	5.68	7.63	8.94	10.2	11.9	13.2
10 min	7.85	8.87	12.1	14.3	16.4	19.3	21.4
15 min	9.69	11.0	15.0	17.7	20.4	23.9	26.6
20 min	11.1	12.5	17.0	20.1	23.1	27.1	30.1
25 min	12.1	13.7	18.6	21.9	25.2	29.4	32.7
30 min	13.0	14.7	19.9	23.4	26.8	31.3	34.8
45 min	15.1	17.0	22.8	26.6	30.4	35.4	39.2
1 hour	16.7	18.7	24.9	29.0	33.1	38.4	42.5
1.5 hour	19.2	21.4	28.1	32.7	37.2	43.1	47.6
2 hour	21.2	23.5	30.8	35.7	40.6	47.0	52.0
3 hour	24.4	27.0	35.2	40.9	46.4	53.9	59.7
4.5 hour	28.3	31.3	40.8	47.4	54.0	62.9	69.9
6 hour	31.5	34.9	45.7	53.2	60.7	71.1	79.2
9 hour	36.7	40.7	53.8	63.1	72.5	85.4	95.6
12 hour	40.9	45.5	60.7	71.5	82.5	97.7	110
18 hour	47.3	52.9	71.6	85.1	98.9	118	133
24 hour	52.1	58.5	80.0	95.7	112	134	152
30 hour	55.8	63.0	86.8	104	122	147	166
36 hour	58.9	66.6	92.3	111	131	157	178
48 hour	63.6	72.1	101	122	144	173	196
72 hour	69.7	79.2	111	135	159	192	218
96 hour	73.6	83.7	117	142	168	202	229
120 hour	76.6	87.0	122	147	173	208	236

www.bom.gov.au/water/designRainfalls/revised-ifd/?coordinate_type=dd&latitude=-34.712&longitude=149.752&user_label=&year=2016&sdmin=t... 1/2

11/10/2019

Rainfall IFD Data System: Water Information: Bureau of Meteorology

144 hour	79.1	89.7	125	150	176	212	241
168 hour	81.4	92.1	127	153	179	215	244

Note:

The 50% AEP IFD **does not** correspond to the 2 year Average Recurrence Interval (ARI) IFD. Rather it corresponds to the 1.44 ARI.

* The 20% AEP IFD **does not** correspond to the 5 year Average Recurrence Interval (ARI) IFD. Rather it corresponds to the 4.48 ARI.

This page was created at **17:04 on Friday 11 October 2019 (AEDT)**

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Goulburn Race Club – Flood Study

ATTACHMENT B – ARR DATA HUB RESULTS

18/09/2019

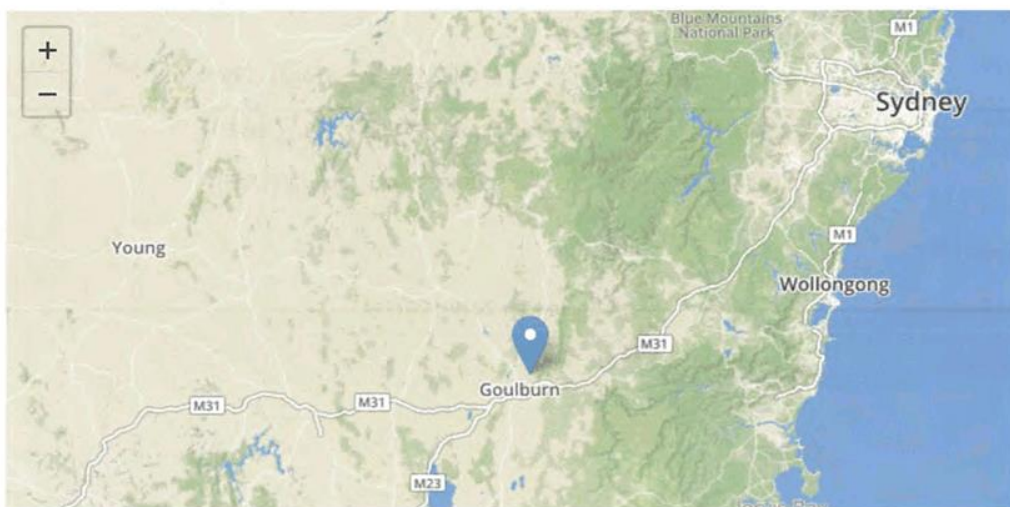
Results | ARR Data Hub

ATTENTION: This site was updated recently, changing some of the functionality. Please see the changelog ([./changelog](#)) for further information

Australian Rainfall & Runoff Data Hub - Results

Input Data

Longitude	149.752
Latitude	-34.712
Selected Regions (clear)	
River Region	show
ARF Parameters	show
Storm Losses	show
Temporal Patterns	show
Areal Temporal Patterns	show
BOM IFDs	show
Median Preburst Depths and Ratios	show
10% Preburst Depths	show
25% Preburst Depths	show
75% Preburst Depths	show
90% Preburst Depths	show
Interim Climate Change Factors	show
Probability Neutral Burst Initial Loss (./nsw_specific)	show



data.arr-software.org

1/10

18/09/2019

Results | ARR Data Hub



Data

River Region

Division	South East Coast (NSW)
River Number	12
River Name	Hawkesbury River

Layer Info

Time Accessed	18 September 2019 11:37AM
Version	2016_v1

ARF Parameters

$$ARF = \text{Min} \left\{ 1, \left[1 - a \left(\text{Area}^b - \log_{10} \text{Duration} \right) \text{Duration}^{-d} + e \text{Area}^f \text{Duration}^g (0.3 + \log_{10} AEP) + h 10^{i \frac{\text{Area} \cdot \text{Duration}}{1440}} (0.3 + \log_{10} AEP) \right] \right\}$$

Zone	a	b	c	d	e	f	g	h	i
SE Coast	0.06	0.361	0.0	0.317	8.11e-05	0.651	0.0	0.0	0.0

Short Duration ARF

$$ARF = \text{Min} \left[1, 1 - 0.287 \left(\text{Area}^{0.265} - 0.439 \log_{10} (\text{Duration}) \right) \cdot \text{Duration}^{-0.36} + 2.26 \times 10^{-3} \times \text{Area}^{0.226} \cdot \text{Duration}^{0.125} (0.3 + \log_{10} (AEP)) + 0.0141 \times \text{Area}^{0.213} \times 10^{-0.021 \frac{(\text{Duration} - 180)^2}{1440}} (0.3 + \log_{10} (AEP)) \right]$$

Layer Info

Time Accessed	18 September 2019 11:37AM
Version	2016_v1

18/09/2019

Results | ARR Data Hub

Storm Losses

Note: Burst Loss = Storm Loss - Preburst

Note: These losses are only for rural use and are **NOT FOR DIRECT USE** in urban areas

Note: As this point is in NSW the advice provided on losses and pre-burst on the NSW Specific Tab of the ARR Data Hub (.nsw_specific) is to be considered. In NSW losses are derived considering a hierarchy of approaches depending on the available loss information. The continuing storm loss information from the ARR Datahub provided below should only be used where relevant under the loss hierarchy (level 5) and where used is to be multiplied by the factor of 0.4.

ID	17778.0
Storm Initial Losses (mm)	16.0
Storm Continuing Losses (mm/h)	2.7

Layer Info

Time Accessed	18 September 2019 11:37AM
Version	2016_v1

Temporal Patterns | Download (.zip) (static/temporal_patterns/TP/ECsouth.zip)

code	ECsouth
Label	East Coast South

Layer Info

Time Accessed	18 September 2019 11:37AM
Version	2016_v2

Areal Temporal Patterns | Download (.zip) (./static/temporal_patterns/Areal/Areal_ECsouth.zip)

code	ECsouth
arealabel	East Coast South

Layer Info

Time Accessed	18 September 2019 11:37AM
Version	2016_v2

BOM IFDs

Click here (http://www.bom.gov.au/water/designRainfalls/revised-ifd/?year=2016&coordinate_type=dd&latitude=-34.712&longitude=149.752&sdmin=true&sdhr=true&sdday=true&user_label=) to obtain the IFD depths for catchment centroid from the BoM website

Layer Info

Time Accessed	18 September 2019 11:37AM
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data.arr-software.org

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18/09/2019

Results | ARR Data Hub

Median Preburst Depths and Ratios

Values are of the format depth (ratio) with depth in mm

min (h)\AEP(%)	50	20	10	5	2	1
60 (1.0)	0.7 (0.038)	0.4 (0.016)	0.2 (0.007)	0.0 (0.000)	0.0 (0.000)	0.0 (0.000)
90 (1.5)	1.9 (0.089)	1.1 (0.038)	0.5 (0.016)	0.0 (0.000)	0.1 (0.001)	0.1 (0.002)
120 (2.0)	0.2 (0.008)	0.2 (0.006)	0.2 (0.004)	0.1 (0.004)	0.2 (0.003)	0.2 (0.003)
180 (3.0)	0.1 (0.004)	0.8 (0.022)	1.2 (0.030)	1.7 (0.036)	1.1 (0.021)	0.7 (0.012)
360 (6.0)	1.7 (0.048)	1.1 (0.024)	0.7 (0.013)	0.3 (0.006)	1.0 (0.014)	1.5 (0.019)
720 (12.0)	0.2 (0.005)	1.9 (0.032)	3.1 (0.043)	4.2 (0.051)	6.9 (0.070)	8.9 (0.081)
1080 (18.0)	0.0 (0.000)	3.0 (0.042)	5.0 (0.058)	6.8 (0.069)	9.9 (0.084)	12.1 (0.091)
1440 (24.0)	0.0 (0.000)	0.3 (0.003)	0.4 (0.005)	0.6 (0.005)	3.7 (0.027)	6.0 (0.039)
2160 (36.0)	0.0 (0.000)	0.0 (0.000)	0.0 (0.000)	0.0 (0.000)	0.6 (0.004)	1.0 (0.006)
2880 (48.0)	0.0 (0.000)	0.0 (0.000)	0.0 (0.000)	0.0 (0.000)	0.0 (0.000)	0.0 (0.000)
4320 (72.0)	0.0 (0.000)	0.0 (0.000)	0.0 (0.000)	0.0 (0.000)	0.0 (0.000)	0.0 (0.000)

Layer Info

Time Accessed 18 September 2019 11:37AM

Version 2018_v1

Note Preburst interpolation methods for catchment wide preburst has been slightly altered. Point values remain unchanged.

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Results | ARR Data Hub

10% Preburst Depths

Values are of the format depth (ratio) with depth in mm

min (h)\AEP(%)	50	20	10	5	2	1
60 (1.0)	0.0 (0.000)	0.0 (0.000)	0.0 (0.000)	0.0 (0.000)	0.0 (0.000)	0.0 (0.000)
90 (1.5)	0.0 (0.000)	0.0 (0.000)	0.0 (0.000)	0.0 (0.000)	0.0 (0.000)	0.0 (0.000)
120 (2.0)	0.0 (0.000)	0.0 (0.000)	0.0 (0.000)	0.0 (0.000)	0.0 (0.000)	0.0 (0.000)
180 (3.0)	0.0 (0.000)	0.0 (0.000)	0.0 (0.000)	0.0 (0.000)	0.0 (0.000)	0.0 (0.000)
360 (6.0)	0.0 (0.000)	0.0 (0.000)	0.0 (0.000)	0.0 (0.000)	0.0 (0.000)	0.0 (0.000)
720 (12.0)	0.0 (0.000)	0.0 (0.000)	0.0 (0.000)	0.0 (0.000)	0.0 (0.000)	0.0 (0.000)
1080 (18.0)	0.0 (0.000)	0.0 (0.000)	0.0 (0.000)	0.0 (0.000)	0.0 (0.000)	0.0 (0.000)
1440 (24.0)	0.0 (0.000)	0.0 (0.000)	0.0 (0.000)	0.0 (0.000)	0.0 (0.000)	0.0 (0.000)
2160 (36.0)	0.0 (0.000)	0.0 (0.000)	0.0 (0.000)	0.0 (0.000)	0.0 (0.000)	0.0 (0.000)
2880 (48.0)	0.0 (0.000)	0.0 (0.000)	0.0 (0.000)	0.0 (0.000)	0.0 (0.000)	0.0 (0.000)
4320 (72.0)	0.0 (0.000)	0.0 (0.000)	0.0 (0.000)	0.0 (0.000)	0.0 (0.000)	0.0 (0.000)

Layer Info

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Version 2018_v1

Note Preburst interpolation methods for catchment wide preburst has been slightly altered. Point values remain unchanged.

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Results | ARR Data Hub

25% Preburst Depths

Values are of the format depth (ratio) with depth in mm

min (h)\AEP(%)	50	20	10	5	2	1
60 (1.0)	0.0 (0.000)	0.0 (0.000)	0.0 (0.000)	0.0 (0.000)	0.0 (0.000)	0.0 (0.000)
90 (1.5)	0.0 (0.000)	0.0 (0.000)	0.0 (0.000)	0.0 (0.000)	0.0 (0.000)	0.0 (0.000)
120 (2.0)	0.0 (0.000)	0.0 (0.000)	0.0 (0.000)	0.0 (0.000)	0.0 (0.000)	0.0 (0.000)
180 (3.0)	0.0 (0.000)	0.0 (0.000)	0.0 (0.000)	0.0 (0.000)	0.0 (0.000)	0.0 (0.000)
360 (6.0)	0.0 (0.000)	0.0 (0.000)	0.0 (0.000)	0.0 (0.000)	0.0 (0.000)	0.0 (0.000)
720 (12.0)	0.0 (0.000)	0.0 (0.000)	0.0 (0.000)	0.0 (0.000)	0.0 (0.000)	0.0 (0.000)
1080 (18.0)	0.0 (0.000)	0.0 (0.000)	0.0 (0.000)	0.0 (0.000)	0.0 (0.000)	0.0 (0.000)
1440 (24.0)	0.0 (0.000)	0.0 (0.000)	0.0 (0.000)	0.0 (0.000)	0.0 (0.000)	0.0 (0.000)
2160 (36.0)	0.0 (0.000)	0.0 (0.000)	0.0 (0.000)	0.0 (0.000)	0.0 (0.000)	0.0 (0.000)
2880 (48.0)	0.0 (0.000)	0.0 (0.000)	0.0 (0.000)	0.0 (0.000)	0.0 (0.000)	0.0 (0.000)
4320 (72.0)	0.0 (0.000)	0.0 (0.000)	0.0 (0.000)	0.0 (0.000)	0.0 (0.000)	0.0 (0.000)

Layer Info

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Note Preburst interpolation methods for catchment wide preburst has been slightly altered. Point values remain unchanged.

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Results | ARR Data Hub

75% Preburst Depths

Values are of the format depth (ratio) with depth in mm

min (h)\AEP(%)	50	20	10	5	2	1
60 (1.0)	10.9 (0.582)	7.0 (0.282)	4.4 (0.153)	2.0 (0.060)	5.2 (0.135)	7.6 (0.179)
90 (1.5)	7.6 (0.355)	7.0 (0.250)	6.7 (0.203)	6.3 (0.169)	10.2 (0.236)	13.1 (0.274)
120 (2.0)	8.6 (0.367)	11.0 (0.359)	12.6 (0.354)	14.2 (0.349)	12.9 (0.275)	12.0 (0.231)
180 (3.0)	11.2 (0.413)	12.5 (0.354)	13.4 (0.327)	14.2 (0.306)	12.4 (0.230)	11.0 (0.185)
360 (6.0)	13.2 (0.379)	13.9 (0.304)	14.4 (0.270)	14.8 (0.244)	20.1 (0.283)	24.1 (0.305)
720 (12.0)	9.7 (0.212)	13.4 (0.221)	15.9 (0.223)	18.3 (0.222)	32.0 (0.327)	42.2 (0.384)
1080 (18.0)	2.2 (0.042)	9.9 (0.138)	15.0 (0.176)	19.9 (0.201)	31.8 (0.269)	40.7 (0.306)
1440 (24.0)	0.5 (0.008)	4.2 (0.053)	6.7 (0.070)	9.1 (0.081)	21.8 (0.163)	31.4 (0.207)
2160 (36.0)	0.0 (0.000)	1.6 (0.017)	2.6 (0.023)	3.6 (0.027)	9.3 (0.059)	13.5 (0.076)
2880 (48.0)	0.0 (0.000)	1.2 (0.012)	2.1 (0.017)	2.8 (0.020)	7.1 (0.041)	10.4 (0.053)
4320 (72.0)	0.0 (0.000)	0.0 (0.000)	0.0 (0.000)	0.0 (0.000)	0.6 (0.003)	1.1 (0.005)

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Note Preburst interpolation methods for catchment wide preburst has been slightly altered. Point values remain unchanged.

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Results | ARR Data Hub

90% Preburst Depths

Values are of the format depth (ratio) with depth in mm

min (h)\AEP(%)	50	20	10	5	2	1
60 (1.0)	28.5 (1.524)	22.9 (0.919)	19.1 (0.658)	15.5 (0.469)	22.0 (0.572)	26.8 (0.631)
90 (1.5)	20.7 (0.968)	23.8 (0.845)	25.8 (0.789)	27.8 (0.746)	24.8 (0.576)	22.6 (0.475)
120 (2.0)	19.0 (0.808)	23.0 (0.748)	25.7 (0.719)	28.3 (0.697)	28.4 (0.604)	28.5 (0.549)
180 (3.0)	19.9 (0.735)	24.5 (0.696)	27.6 (0.675)	30.5 (0.658)	29.6 (0.549)	28.9 (0.484)
360 (6.0)	24.6 (0.704)	29.5 (0.645)	32.7 (0.615)	35.8 (0.590)	50.2 (0.706)	60.9 (0.770)
720 (12.0)	21.6 (0.475)	36.3 (0.598)	46.0 (0.644)	55.4 (0.671)	72.4 (0.741)	85.2 (0.776)
1080 (18.0)	15.0 (0.283)	26.7 (0.373)	34.5 (0.406)	42.0 (0.424)	62.5 (0.530)	77.9 (0.585)
1440 (24.0)	14.3 (0.244)	16.8 (0.210)	18.5 (0.194)	20.1 (0.180)	38.2 (0.285)	51.8 (0.342)
2160 (36.0)	6.8 (0.102)	10.8 (0.117)	13.4 (0.121)	15.9 (0.122)	34.3 (0.218)	48.0 (0.269)
2880 (48.0)	4.1 (0.056)	12.5 (0.124)	18.0 (0.148)	23.4 (0.163)	32.1 (0.185)	38.6 (0.196)
4320 (72.0)	1.2 (0.015)	6.8 (0.061)	10.6 (0.078)	14.2 (0.089)	11.6 (0.060)	9.6 (0.044)

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Note Preburst interpolation methods for catchment wide preburst has been slightly altered. Point values remain unchanged.

18/09/2019

Results | ARR Data Hub

Interim Climate Change Factors

	RCP 4.5	RCP6	RCP 8.5
2030	0.869 (4.3%)	0.783 (3.9%)	0.983 (4.9%)
2040	1.057 (5.3%)	1.014 (5.1%)	1.349 (6.8%)
2050	1.272 (6.4%)	1.236 (6.2%)	1.773 (9.0%)
2060	1.488 (7.5%)	1.458 (7.4%)	2.237 (11.5%)
2070	1.676 (8.5%)	1.691 (8.6%)	2.722 (14.2%)
2080	1.810 (9.2%)	1.944 (9.9%)	3.209 (16.9%)
2090	1.862 (9.5%)	2.227 (11.5%)	3.679 (19.7%)

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Note ARR recommends the use of RCP4.5 and RCP 8.5 values. These have been updated to the values that can be found on the climate change in Australia website.

Probability Neutral Burst Initial Loss

min (h)\AEP(%)	50	20	10	5	2	1
60 (1.0)	11.0	7.2	7.1	8.0	7.4	5.4
90 (1.5)	11.3	7.7	7.2	7.3	6.3	4.7
120 (2.0)	11.7	7.8	6.8	7.1	6.1	4.3
180 (3.0)	11.3	7.7	7.0	7.4	6.7	4.6
360 (6.0)	10.7	8.0	8.1	7.6	7.1	3.7
720 (12.0)	11.8	8.5	8.4	7.7	6.9	1.9
1080 (18.0)	13.9	9.7	9.1	7.8	7.6	2.0
1440 (24.0)	14.7	12.1	12.3	12.3	9.1	3.7
2160 (36.0)	16.2	13.7	14.2	15.3	10.5	6.0
2880 (48.0)	16.8	13.9	13.7	15.3	11.5	9.1
4320 (72.0)	17.7	15.1	15.1	17.2	14.8	10.8

Layer Info

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18/09/2019

Results | ARR Data Hub

Version 2018_v1

Note As this point is in NSW the advice provided on losses and pre-burst on the NSW Specific Tab of the ARR Data Hub (./nsw_specific) is to be considered. In NSW losses are derived considering a hierarchy of approaches depending on the available loss information. Probability neutral burst initial loss values for NSW are to be used in place of the standard initial loss and pre-burst as per the losses hierarchy.

[Download TXT \(downloads/9ea06173-43bd-4c36-8c00-a9c81cd02c52.txt\)](#)

[Download JSON \(downloads/0879dceb-d5c1-43fe-b03e-961bc5d52e0a.json\)](#)

[Generating PDF... \(downloads/0b8c5a40-7c44-4591-a7e8-5c18a2b59015.pdf\)](#)

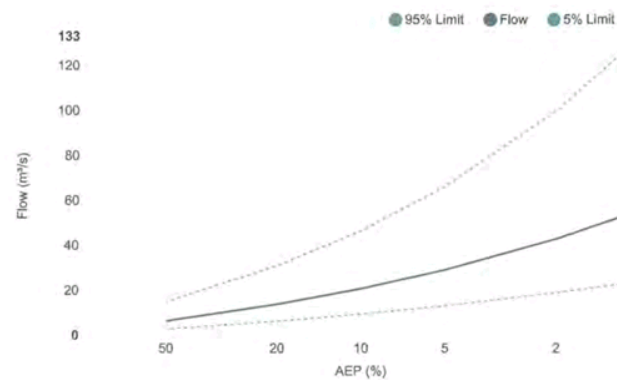
Goulburn Race Club – Flood Study

ATTACHMENT C – RFFE MODEL RESULTS

19/09/2019

Results | Regional Flood Frequency Estimation Model

Results | Regional Flood Frequency Estimation Model



AEP (%)	Discharge (m³/s)	Lower Confidence Limit (5%) (m³/s)	Upper Confidence Limit (95%) (m³/s)
50	6.50	2.86	15.1
20	13.9	6.38	31.0
10	20.8	9.54	46.6
5	29.2	13.2	66.4
2	42.9	19.0	100
1	55.6	24.0	133

Statistics

Variable	Value	Standard Dev
Mean	2.360	0.428
Standard Dev	0.881	0.138
Skew	0.092	0.026

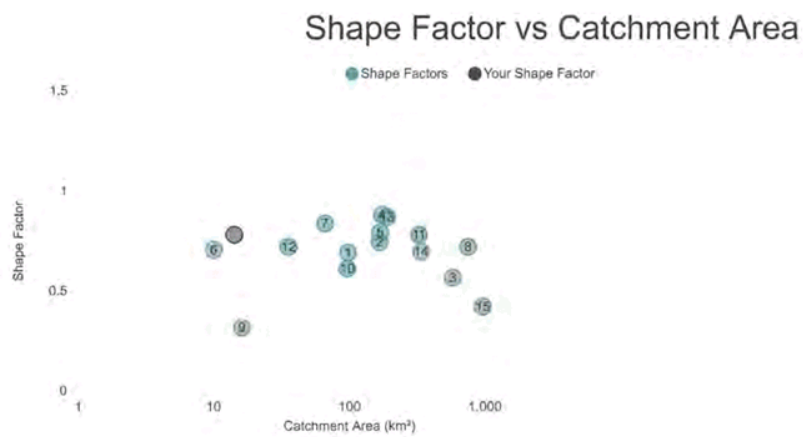
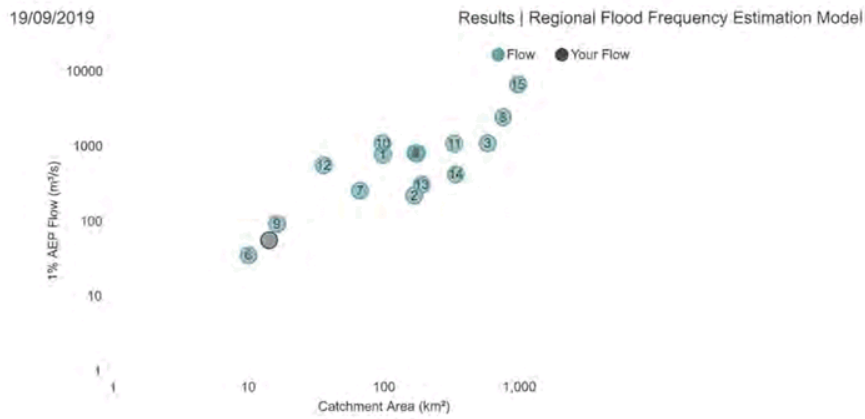
Note: These statistics come from the nearest gauged catchment. Details.

Correlation

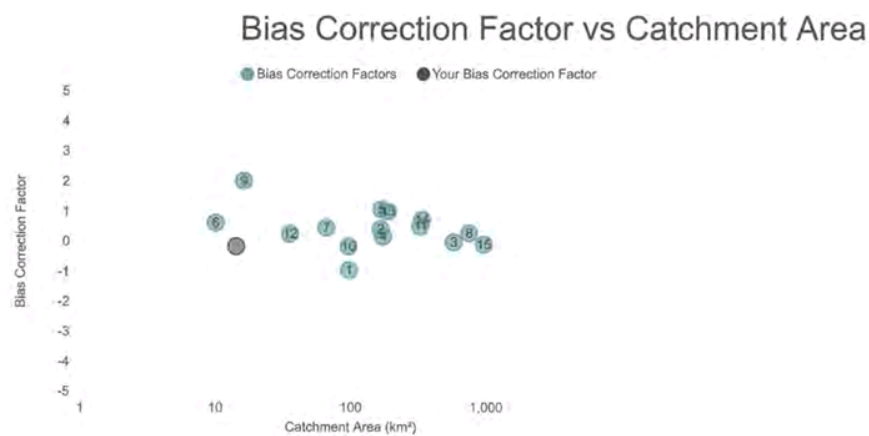
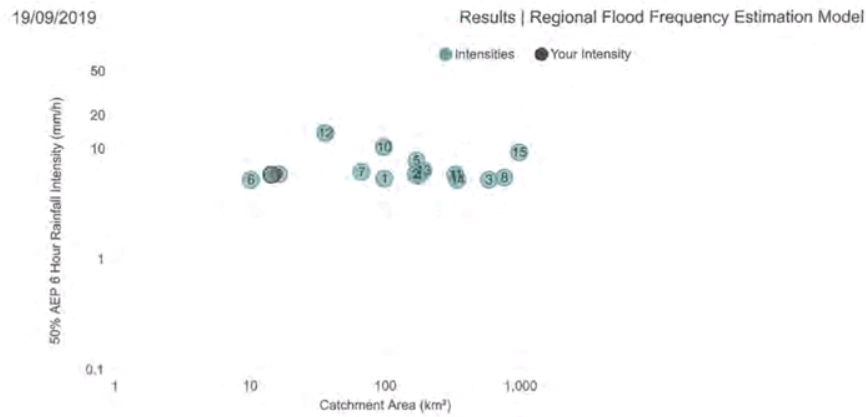
1.000		
-0.330	1.000	
0.170	-0.280	1.000

Note: These statistics are common to each region. Details.

1% AEP Flow vs Catchment Area



Intensity vs Catchment Area



Download

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[Nearby](#)
[JSON](#)

Input Data

Date/Time

2019-09-19 10:24

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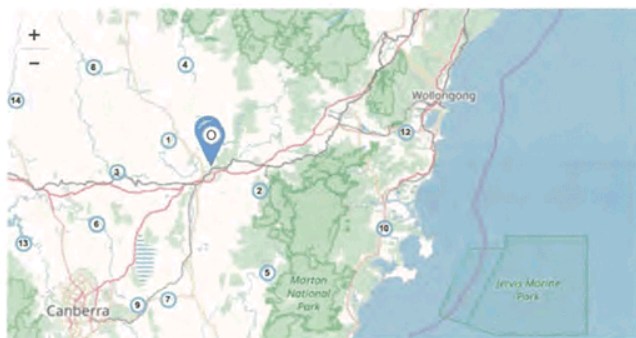
3/4

19/09/2019

Results | Regional Flood Frequency Estimation Model

Input Data

Catchment Name	Racing Club
Latitude (Outlet)	-34.7125
Longitude (Outlet)	149.756
Latitude (Centroid)	-34.691
Longitude (Centroid)	149.738
Catchment Area (km ²)	14.0
Distance to Nearest Gauged Catchment (km)	22.81
50% AEP 6 Hour Rainfall Intensity (mm/h)	5.798875
2% AEP 6 Hour Rainfall Intensity (mm/h)	11.788397
Rainfall Intensity Source (User/Auto)	Auto
Region	East Coast
Region Version	RFFE Model 2016 v1
Region Source (User/Auto)	Auto
Shape Factor	0.78
Interpolation Method	Natural Neighbour
Bias Correction Value	-0.175

Leaflet (<http://leafletjs.com>) | © OpenStreetMap (<http://osm.org/copyright>) contributors

Method by Dr Ataur Rahman and Dr Khaled Haddad from Western Sydney University for the Australian Rainfall and Runoff Project. Full description of the project can be found at the project page (<http://arr.ga.gov.au/revision-projects/project-list/projects/project-5>) on the ARR website. Send any questions regarding the method or project here (<mailto:admin@arr-software.org>).



ENGINEERS AUSTRALIA (<http://www.engineersaustralia.org.au>)



WESTERN SYDNEY UNIVERSITY (<http://www.uws.edu.au>)

18 December 2019

WTJ19-540

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General Manager
Goulburn Mulwaree Council
184 Bourke Street
Goulburn, NSW, 2580

Via: email correspondence

Attention: General Manager

SUBMISSION TO THE DRAFT URBAN AND FRINGE HOUSING STRATEGY

LOT 23 DP 1256090 WILSON DRIVE, MARULAN

EXECUTIVE SUMMARY

Willowtree Planning, on behalf of Darraby Pty Ltd and Marulan Estates Pty Ltd write in response to *the draft Urban and Fringe Housing Strategy* (draft UFHS) currently on exhibition.

Darraby and Marulan Estates support the principles and directions of the draft UFHS, identifying opportunities for additional dwellings within the urban and fringe areas of Goulburn and Marulan. In this respect, this submission presents further opportunities to provide for additional housing within these fringe/urban areas which should be a priority for these directions as it would ensure the retention of, and mitigate impacts to, agricultural land and production. These additional and alternative options include:

- Existing land zoned RU6 on Lot 23 DP 1256090 (located in the Marulan West Precinct); and
- Existing IN1 and IN2 land located along Portland Avenue and Wilson Drive.

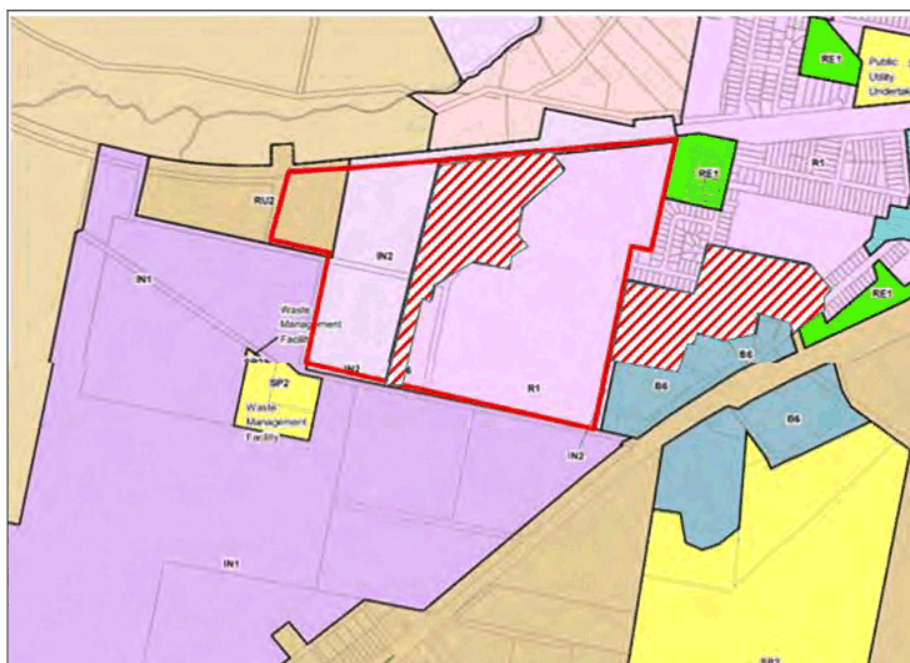


Figure 1. Areas for future development opportunity (shown in red and white hatching)

Submission to draft Urban and Fringe Housing Strategy

Lot 23 DP 1256090 Wilson Drive, Marulan

Specific to the above, additional housing opportunities within close proximity to established urban areas and existing and/or proposed infrastructure should be considered first before impacting surrounding agricultural land.

The RU6 Zone should be considered for permitting additional residential housing under R1 General Residential zone, reflective of the land immediately to the east. It is considered reasonable to conclude that alternative development outcomes in this location should be considered as part of the draft UFHS.

Further to the above, as a secondary objective to this submission, the draft UFHS should consider the existing IN1 and IN2 industrial land along Portland Avenue and Wilson Drive for potential rezoning for residential purposes to facilitate a more harmonious land use outcome close to Marulan Town Centre and reduce impact on residents and local roads from industrial land uses and traffic.

Overall, the opportunity across the Site identified within this submission would positively respond to the draft UFHS and, if implemented, will provide additional housing in proximity to employment and local services representing an orderly and practical development outcome within Marulan.

1.0 INTRODUCTION

This submission considers and responds to the recommendations and desired housing outcomes for the Goulburn Mulwaree Local Government Area (LGA). Specifically, this submission focuses on Marulan and relates to the desired outcomes and unidentified potential for the property located at **Lot 23 DP 1256090 Wilson Drive, Marulan** (the Site).

It is understood that the draft UFHS has been prepared in response to residential land pressure and demand from sustained population growth in the Goulburn Mulwaree LGA and an increasing shortage of available residential zoned land, particularly in the City of Goulburn. The draft UFHS focuses on the urban and fringe areas of Goulburn and Marulan, identifying opportunities for an additional 3,500 dwellings over the next 18 years to 2036.

The draft UFHS identifies opportunity areas for the following:

- **Urban Residential Land:** General or Low Density Residential, serviced with reticulated water and sewer and a minimum lot size of 700sqm;
- **Future Urban Land:** investigation areas for future urban residential land that will be critical in the delivery of housing in the very long term in both Marulan and Goulburn;
- **Large Lot Residential Land:** land suitable for the development of rural residential housing, typically un-serviced and with a minimum lot size of 2 hectares.

Prior to discussing the desired outcomes for the Site as outlined in the ensuing sections of this submission, it is important to note that Darraby and Marulan Estates are strongly in support of the overall vision and direction of the draft UFHS which rightly identifies and encourages appropriate housing growth within the LGA. However, what this submission aims to identify are some areas of Marulan which should be reconsidered in relation to the draft UFHS directions. In this respect, this submission identifies additional housing opportunities at the Site, as well as some other considerations, which responds to the overarching planning priorities of the draft UFHS.

Darraby and Marulan Estates supports Council's vision and would like to use this opportunity to highlight where this could be further investigated and enhanced to reach an outcome that will benefit the Marulan local community; support the forecast population demand and subsequent housing growth; and contribute more to affordable housing within the LGA and wider region.

Submission to draft Urban and Fringe Housing Strategy

Lot 23 DP 1256090 Wilson Drive, Marulan

2.0 SITE AND CONTEXT

The Site is identified as Lot 23 DP 1256090 Wilson Drive, Marulan and exhibits an area of approximately 94 hectares. The Site benefits from a frontage to Wilson Drive to the north. To the east, the Site adjoins the perimeter of the Marulan Town Centre. To the west and south, the Site immediately adjoins land zoned for industrial purposes.

A portion of the Site is identified for a future 500 lot subdivision. In May 2019, **DA/0334/1819** was lodged with Council for Stage 2 of the subdivision for 127 lots. Stage 1 was approved by Council for a 22 lot subdivision and is now constructed and registered.

In its existing state, the Site is zoned R1 General Residential, RU6 Transition, IN2 Light Industry and RU2 Rural Landscape. Expressly, this submission relates to the portion of the Site currently zoned **RU6 Transition** and potential housing opportunities within this location.

The portion of the Site to be considered for future residential development sits outside of the proposed Stage 2 subdivision application.

Figure 2 illustrates the Site including the location of the approved and proposed subdivisions, as well as the RU6 zoned land subject to this submission.

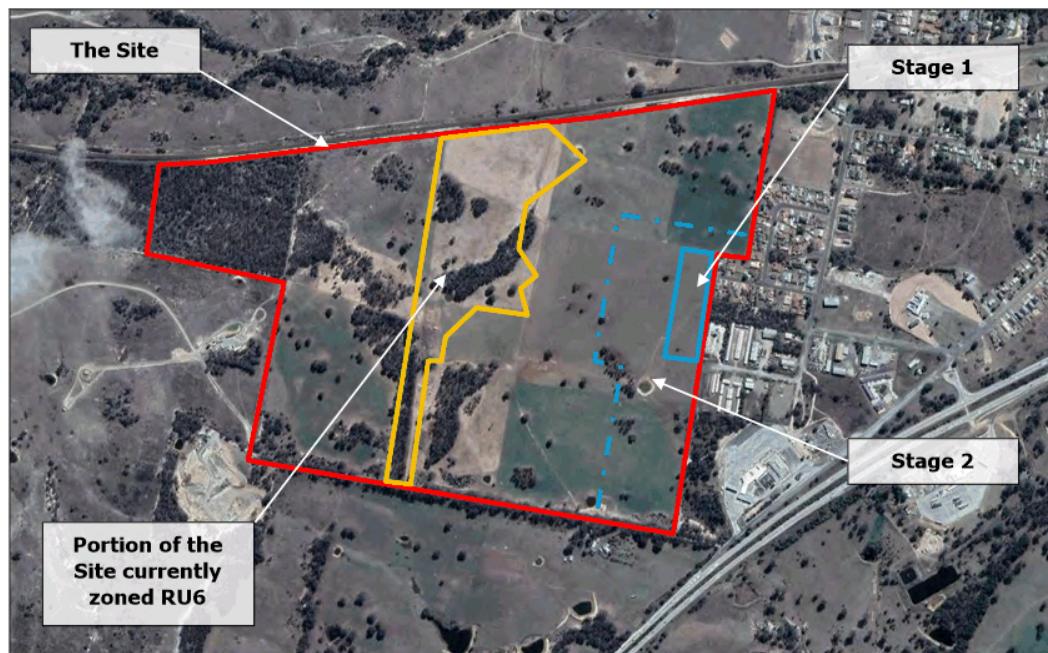


Figure 2. Aerial of the Site (Source: Nearmap, 2019)

Submission to draft Urban and Fringe Housing Strategy
 Lot 23 DP 1256090 Wilson Drive, Marulan

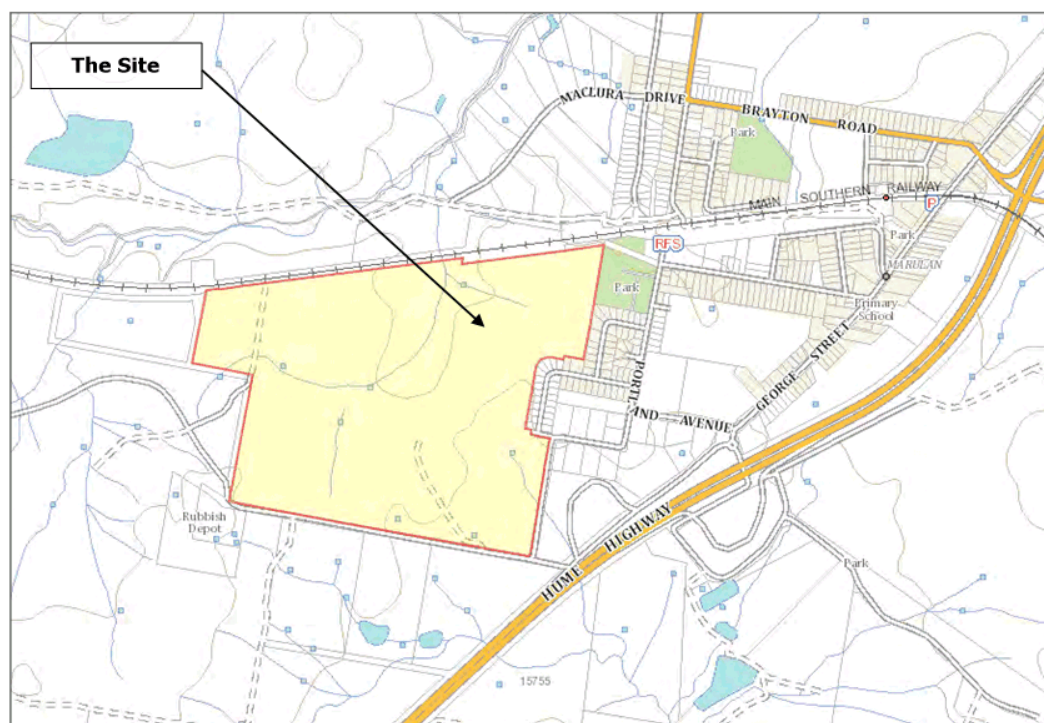


Figure 3. Cadastral of the Site (Source: SIX Maps, 2019)

3.0 KEY TARGETS AND PRIORITIES OF THE DRAFT URBAN AND FRINGE HOUSING STRATEGY

3.1 Housing Growth and Supply Targets

The draft UFHS identifies the following:

- In Marulan, population growth has been significant with an increase in population between 2006 and 2016 of **27%**;
- The Goulburn Mulwaree LGA is expected to reach between 33,350 and 37,202 residents by 2036, approximately 5,000 to 7,000 additional residents are expected;
- The majority of recent growth has been through residential subdivisions in Goulburn and Marulan; these new subdivisions have typically provided R2 Low Density Residential zoned land with a minimum lot size of 700sqm;
- The draft UFHS indicates there is demand for large lot residential blocks (2 hectares);
- An additional **3,359** dwellings across the LGA will be required to meet demand by **2036**;
- Specifically, the future housing opportunity in Marulan includes the following:
 - **355** dwellings will be required to meet the estimated demand for housing in Marulan;
 - If an assumed **355** dwellings are required to meet the estimated demand, around **53 hectares** of residential zoned land is required;
 - Marulan currently has around **20 hectares** of undeveloped residential land;
 - The land requirement for additional serviced land is **38 hectares** across the life of the UFHS to 2036.

Submission to draft Urban and Fringe Housing Strategy

Lot 23 DP 1256090 Wilson Drive, Marulan

- The draft UFHS identifies Marulan needing to ensure that sufficient land is identified and preserved for future urban residential zoning.
- For the purpose of future development, there are physical constraints to the south and west of Marulan identified and there is a physical barrier created by the Hume Highway to the east. Therefore, the land to the north is earmarked to accommodate the majority of the future housing growth for Marulan.
- Marulan has been divided by individual precincts to facilitate a more robust analysis of the key constraints and in doing so identifying opportunities for development. There are four (4) precincts in Marulan, as per the following:
 - **Marulan Town Centre** - the existing village footprint;
 - **Marulan North** - the area between Brayton Road, Hume Highway and Ambrose Road/Red Hills Road;
 - **Marulan South** - the area south of the Hume Highway and north east of Marulan South Road;
 - **Marulan West** - the area west of Marulan Town Centre including Lynwood Quarry.
- The Site falls within **Precinct 4 – Marulan West**, which is identified as the following:
 - Currently the area contains industrial and infrastructure uses in the south and western portions, forested area in the northern portion with an area of rural residential dwellings just west of Brayton Road;
 - RU2 zoned land has a minimum lot size of 100 hectares.
- Existing housing development in the Marulan West Precinct is typically large lot residential. Diversity of housing typology and opportunity to increase diversity is limited.
- The Marulan West Precinct is considered to be already highly restricted by existing industry and associated buffers and therefore, there is limited opportunity identified for additional housing.
- In light of the above, land to the north is earmarked for the future residential growth.
- Development **opportunities** and **constraints** identified within the Marulan West precinct are illustrated in **Figure 4** and summarised below:

Opportunities:

- The draft UFHS considered the only potential opportunity for additional residential housing is on the fringe of the Town Centre, for which a development application is already being considered.
- There is sufficient area available for housing on larger lots in Marulan generally, however, the densities that have been developed are significantly less than the current minimum lot size allow.

Constraints:

- Mining operations and resource opportunity buffers cover most of this precinct;
- A key industry constraint in the Marulan West Precinct is the Hazardous Industry buffer and landfill site in the south-west;
- Haulage routes with heavy traffic and trains carrying quarried materials and other freight mean that a buffer to residential use is advised to avoid negative impacts on residents. Quality of existing local roads for access into central precinct also poses difficulties.
- Flat areas of lower elevation in the vicinity of Jaorimin Creek may also experience flooding.
- Marulan is highly constrained by bushfire risk and factors such as Asset Protection Zones, building materials and evacuation routes need to be carefully considered.
- It is identified that housing in the Marulan West Precinct would steralise potential resource area/quarry expansion.

Submission to draft Urban and Fringe Housing Strategy

Lot 23 DP 1256090 Wilson Drive, Marulan

In summary, it is understood that given the abovementioned constraints identified in the draft UFHS, the Strategy considers there to be limited opportunity for further housing considerations in the Marulan West Precinct and therefore, the precinct is deemed to be at capacity with respect to residential development, particularly for small lot residential development.

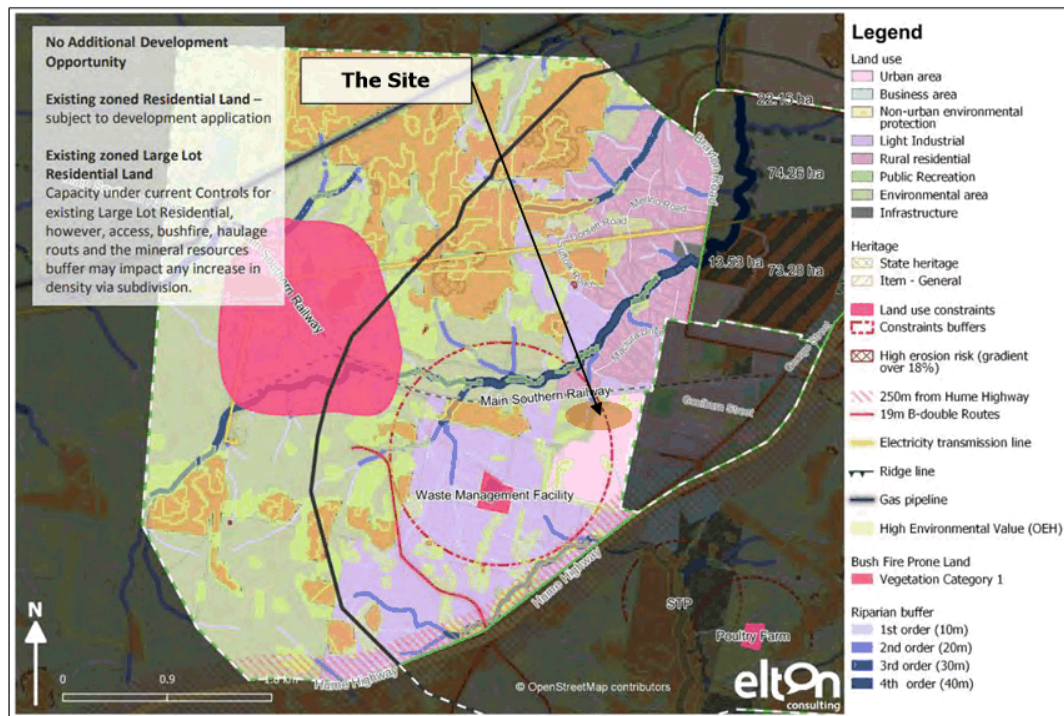


Figure 4. Development Constraints in Marulan (Source: extract from draft Strategy, 2019)

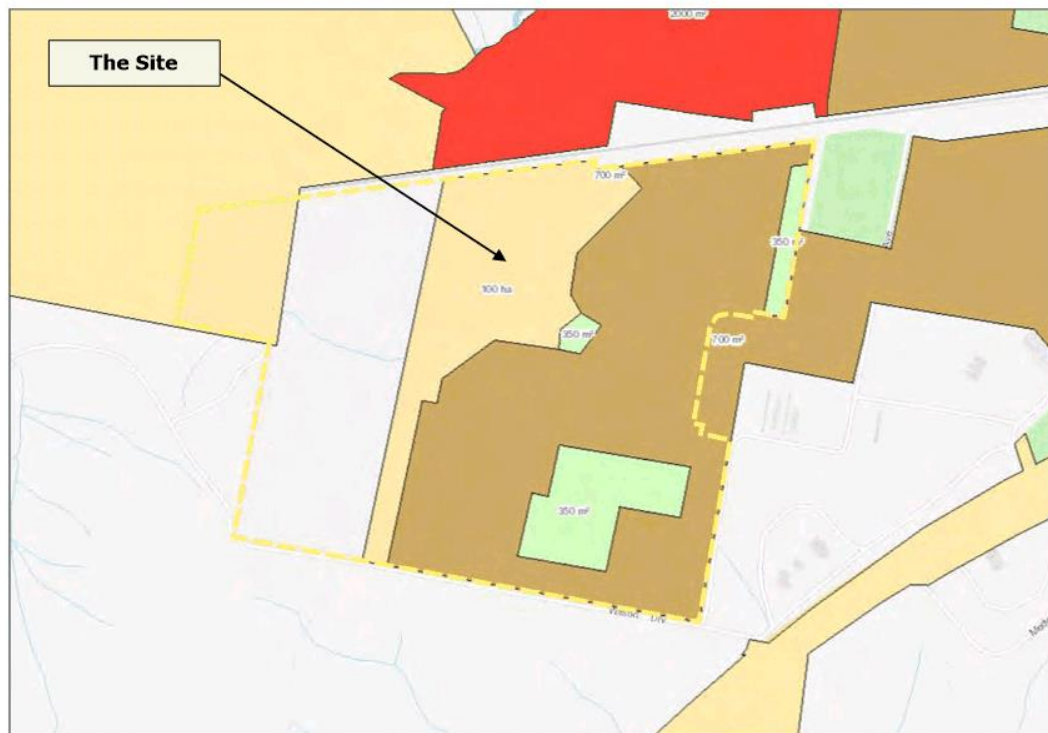
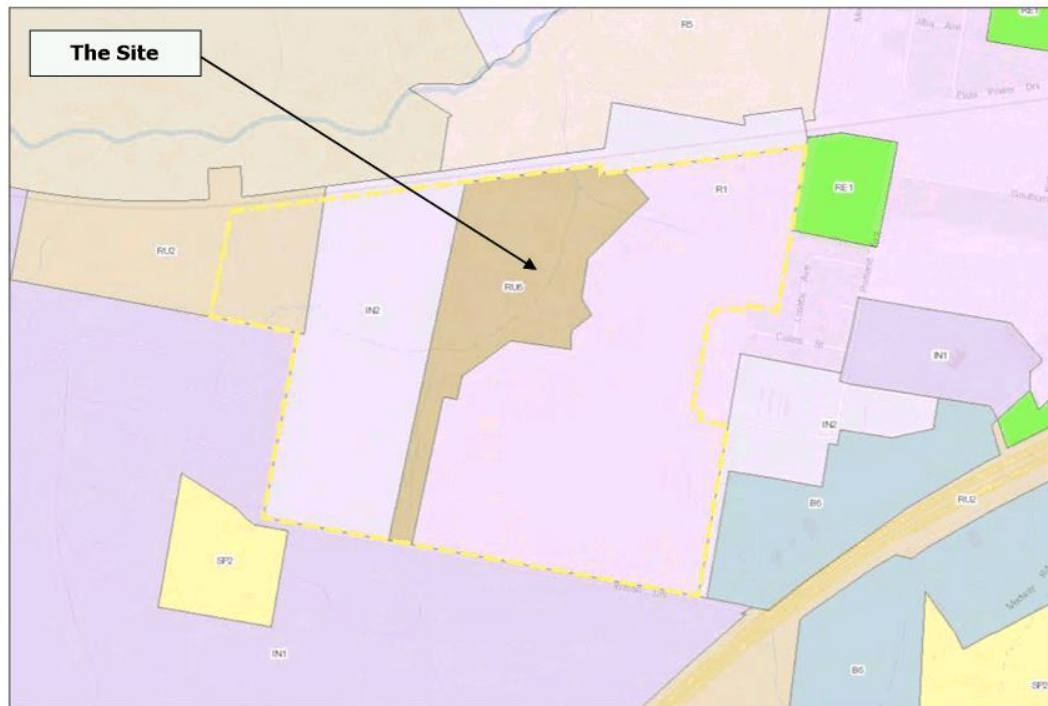
4.0 EXISTING PLANNING CONTROLS

Pursuant to the *Goulburn Mulwaree Local Environmental Plan 2009* (GMLEP 2009), the current minimum lot size applicable to the RU6 zoned portion of the Site is **100ha**. The R1 zoned land immediately to the east of this RU6 zoned land is subject to minimum lot sizes ranging from 350m² to 750m².

The zoning map and minimum lot size map under the GMLEP 2009 are provided below in **Figures 5 and 6** respectively.

The desired development outcome for the RU6 zoned portion of Site comprises small lot residential development for lots **~700m²**. To achieve such an outcome would likely require amendments to the GMLEP 2009 to rezone this area to R1 General Residential as well as amend the minimum lot size maps.

It is our understanding that the intent of the current RU6 zone was to accommodate a large Stormwater Detention Basin. The basin formed part of a now outdated Master Plan that is deemed to be no longer required by Council. As Council have determined that this portion of the Site is its current state is no longer required for the purpose of the Stormwater Detention Basin, then the Site should reasonably be considered for alternative purpose, most notably for the provision of additional housing within Marulan.



Submission to draft Urban and Fringe Housing Strategy
 Lot 23 DP 1256090 Wilson Drive, Marulan

5.0 OBJECTIVES AND INTENDED OUTCOMES

5.1 Overview and Key Objectives

The primary objective of this submission is to identify an area for future housing opportunities which has not been acknowledged in the draft UFHS due to perceived constraints and why this area should be reasonably considered for future housing. The following objectives inform this submission and allude to the strategic significance of the Site.

- Protect and preserve strategically located land for residential development and facilitate orderly development within the Site and its surrounds;
- Assist in accommodating forecast population growth and dwelling targets by providing land to support the required housing and population growth;
- Deliver affordable and diverse housing opportunities for the region reflective of surrounding development and conveniently located within close proximity to services and infrastructure;
- Identify the additional infrastructure being delivered to Marulan to support additional housing;
- Identify the need for contributions expenditure to be refocused to Marulan to support continued growth in this area; and
- Identify the strategic importance of Marulan and market demand for housing in the area as made evident by recent approvals and purchases. In this respect, there needs to be a greater emphasis on the overall contribution to Marulan in relation to infrastructure and services to respond to the housing demand in the area.

These strategic objectives are considered to aptly justify the desired outcomes and recommendations for the planning directions and controls discussed in the ensuing sections.

5.2 Desired Outcomes and Strategic Merit

The desired future development outcomes of the Site as described above align with the direction of the draft UFHS and the need for additional housing and is therefore considered to be of significant strategic importance in terms of contributing to the desired outcomes of the draft strategy.

The Site has been subject to two (2) previous subdivision applications. Stage 1 was approved by Council, with Stage 2 currently under assessment. Evidently, the subdivision of the existing R1 zone land demonstrates that part of the Site, adjoining the RU6 zoned land subject to this submission, has the capability of accommodating housing.

The RU6 zoned land was previously reserved for a stormwater detention basin which is no longer required by Council. Therefore, the existing RU6 zoning is not considered to negate the opportunity for housing in this location similar to what has been approved and considered immediately to the east. Further, the existing RU6 zoning for this portion of the Site is not considered highly appropriate or practical in this location. In this respect, the RU6 Transition zone is typically used for providing a buffer or transition from rural lands to urban areas as is made evident from the first objective of the RU6 zone being:

- *To protect and maintain land that provides a **transition between rural and other land uses** of varying intensities or environmental sensitivities.*

The existing RU6 zoned land is positioned between IN2 Light Industrial zoned land to the west and R1 General Residential zoned land to the east. As such, this RU6 zone contains limited opportunity to provide a transition to rural land which is located further to the east and north-west of the Site and therefore does not effectively allow the zone objectives to be fully satisfied. In this respect, the current zoning throughout the Site is not considered to represent or facilitate future orderly development. Accordingly, it is considered

Submission to draft Urban and Fringe Housing Strategy

Lot 23 DP 1256090 Wilson Drive, Marulan

reasonable to conclude that alternative development outcomes in this location should be considered as part of the draft UFHS.

Given its proximity to the Town Centre and adjoining the R1 General Residential zoned land, the portion of the Site zoned RU6 should be considered for future residential zoned land, preferably R1 General Residential, reflective of the adjoining land. The rezoning of this portion of the Site would contribute to ensuring an adequate supply of land is available to provide additional housing opportunities for Marulan and the wider LGA. The proximity of the Site to the industrial/employment lands provides opportunity for residents to work and live within close proximity to one another. The industrial land located immediately to the west is light industrial and therefore would provide minimal amenity disturbances to future residents. Furthermore, rezoning of the land for residential purposes would limit the potential impact to productive agricultural land from urban development.

Further to the above, as a secondary objective to this submission, the draft UFHS should consider the existing IN1 and IN2 industrial zoned land immediately to the east (along Wilson Drive and Portland Avenue) of the Site for potential rezoning for residential purposes. Such an outcome may provide opportunities to:

- Improve access and amenity through residential and commercial areas.
- Redirect haulage routes and heavy traffic from this area providing an opportunity to improve the quality of local roads. This is in response to one of the constraints identified for the precinct within the draft UFHS.
- Improve the land use interface with the Town Centre and its surrounds.
- Provide further housing opportunities in an appropriate location in response to the targets of the draft UFHS.

Figure 7 below, identifies the two areas that Council should consider for rezoning opportunities.

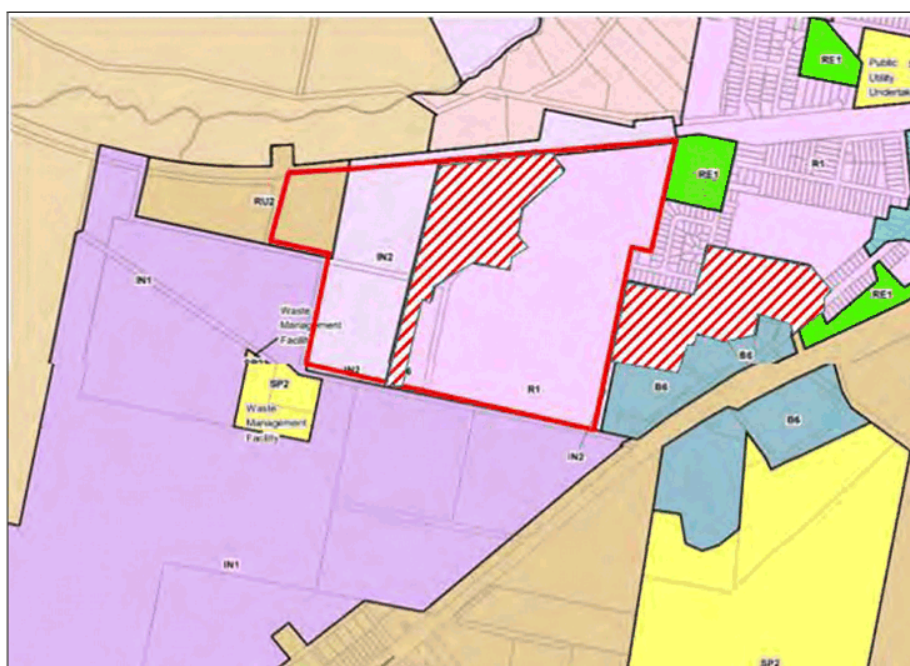


Figure 7. Areas for future development opportunity (shown in red and white hatching)

In addition to the above, it is crucial that the strategic significance of Marulan be further acknowledged by Council. In this respect, Goulburn currently benefits from a large share of contributions being made throughout the LGA which is representative of the significantly higher amount of additional housing nominated in this location proposed under the draft UFHS.

Submission to draft Urban and Fringe Housing Strategy

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Housing in Marulan provides opportunities to a different market compared to Goulburn and the wider Southern Highlands which is largely more affordable compared to these areas. The draft UFHS identifies the need to consider more affordable housing opportunities throughout the LGA and Marulan provides such an opportunity. However, for Marulan to remain a feasible development area into the future, there needs to be further consideration with respect to where contributions are being directed.

In relation to the above, Council should consider redirecting a larger share of the contributions from Goulburn to Marulan. At present, the draft UFHS directs a significant portion of the forecast dwelling targets to Goulburn, being **2,435 dwellings**, of which **276 hectares** would be required. As aforementioned, **355 dwellings**, of which **53 hectares** of residential zoned land is required, have been nominated for Marulan, representing only ~10% if the total dwelling increase across the LGA. This is in comparison to ~72% nominated for Goulburn. As such, there may be opportunity for Marulan to absorb a portion of the forecast additional housing within close proximity to the Town Centre that will be adequately serviced by existing infrastructure and will be highly accessible through the provision of new road infrastructure.

Future road infrastructure is already proposed for the Site providing improved accessibility and vehicular access, along with immediate plans to connect to the water and sewerage supply. Therefore, the Site is considered to be appropriately located and serviced to accommodate additional housing in terms of both capacity and infrastructure.

Overall, the identified opportunity across the Site positively responds to the draft UFHS and, if implemented, will provide additional housing in proximity to employment and local services.

5.3 Site Constraints

Notwithstanding the desired outcomes and strategic merit of the Site discussed above, it is acknowledged that the site constraints identified within the draft UFHS must be overcome.

The Site and its immediate surrounds are currently restricted by access, bushfire, haulage routes, and the mineral resources buffer which may impact any increase in density via subdivision.

As noted in the draft UFHS, the primary constraint to residential development across the Precinct is considered the Lynwood Quarry and the associated transition area. The transition area dissects the Site which currently restricts an increase in residential development in this location. Notwithstanding, the Site is located on the fringe of the identified transition area and therefore development for the purpose of residential accommodation can continue to be achieved across the Site through the implementation of appropriate management measures by quarry operators. Accordingly, the Lynwood Quarry is not considered to have the ability to impact on the amenity of future residential development in this location.

In addition to the above, water and sewerage supply to property will be a contributor to future development opportunities. At present, the extent of the existing Marulan Water and Sewerage Network is illustrated in **Figure 8** below. Whilst it is acknowledged in the draft UFHS that there is no identified capacity constraints to the supply of water for future development, the cost of servicing new development areas is dependent on the proximity to existing mains and the point at which the new infrastructure will connect to the mains network.

As aforementioned, the Stage 1 subdivision application for the Site has previously been approved and has not been constructed and registered with all services available, with Stage 2 currently under assessment. Therefore, it is considered that the approved subdivision will provide an extension of the sewerage and water infrastructure that will in turn facilitate the future development of the Site for the purpose of residential development.

In addition, the entire Site is identified as Bushfire Prone Land and any future development application would need to demonstrate the appropriate mitigation measures are implemented in accordance with Section 100B of the *Rural Fires Act 1997*.

Notwithstanding the above, regardless of the identified development constraints across the Site, there is still considered to be an opportunity to investigate potential housing outcomes within the Site. Whilst it is acknowledged that these outcomes would be subject to further site investigations and studies, these

Submission to draft Urban and Fringe Housing Strategy

Lot 23 DP 1256090 Wilson Drive, Marulan

perceived constraints should not preclude consideration of additional housing opportunities within the Site given its strategic merit.

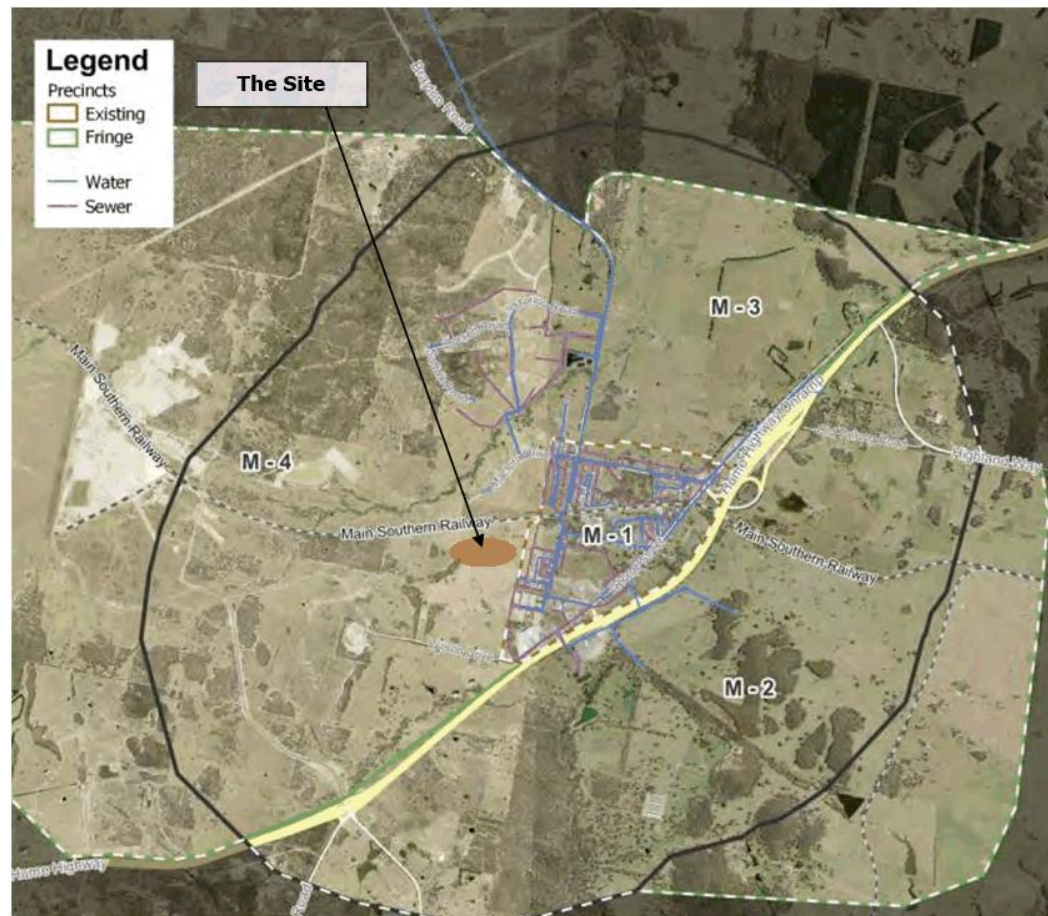


Figure 8. Marulan Water and Sewerage Network (Source: draft Strategy, 2019)

6.0 SUMMARY AND CONCLUSION

Darraby and Marulan Estates supports Council's vision and directions presented in the draft UFHS however would like to use this opportunity to highlight where this could be further enhanced to reach an outcome that will benefit both the Marulan local community and support the forecast population demand and subsequent housing growth.

In summary, this submission has been prepared with the aim to identify the strategic importance of Marulan and the opportunities to provide additional housing within the area, particularly within the Site. In light of the discussions provided within this submission, the following can be concluded:

- Additional housing opportunities within close proximity to established areas is required to accommodate the forecast growing and ageing population.
- Further investigation needs to be undertaken in relation to the land use opportunities to ensure appropriate housing is provided around infrastructure and within close proximity to the Marulan Town Centre.

Submission to draft Urban and Fringe Housing Strategy

Lot 23 DP 1256090 Wilson Drive, Marulan

- There is opportunity for the future development of the Site to assist in achieving the desired 20 year targets on new developments.
- There is opportunity for the future development of the Site to contribute to more affordable housing within the LGA and greater Southern Highlands which is in high demand.
- To achieve the strategic intent of the draft UFHS and facilitate the required growth of residential dwellings in appropriate locations, the amendment of LEP to permit additional housing across the Site should be incorporated as a priority or delivery mechanism in the draft UFHS.
- Land zoning for additional housing should be allowed on the Site, consistent with the land located immediately to the east. Expressly, the RU6 Zone should be amended to permit additional residential housing under R1 General Residential reflective of the land immediately to the east and the Site's strategic position.
- The current zoning throughout the Site is not considered to represent or facilitate future orderly development and does not provide an opportunity for future land uses to adequately satisfy the RU6 zone objectives. Accordingly, it is considered reasonable to conclude that alternative development outcomes in this location should be considered as part of the draft UFHS.
- Further to the above, as a secondary objective to this submission, the draft UFHS should consider the existing IN1 and IN2 industrial zoned land immediately to the east of the Site for potential rezoning for residential purposes to facilitate a more harmonious land use outcome within this part of Marulan and reduce impact on residents and local roads.
- Regardless of the identified development constraints across the Site, there is still considered to be an opportunity to investigate potential housing outcomes within the Site. Whilst it is acknowledged that these outcomes would be subject to further site investigations and studies, these perceived constraints should not preclude consideration of additional housing opportunities within the Site given its strategic merit.
- Given the strategic importance of Marulan and focused growth areas, there should be further reconsideration for the redirection of contributions towards Marulan, with a focus of this growing and facilitating more affordable housing opportunities.

Overall, the identified opportunity across the Site positively responds to the draft UFHS and, if implemented, will provide additional housing in proximity to employment and local services representing an orderly and practical development outcome within this part of Marulan.

The planning review undertaken as part of this submission is considered to demonstrate the strategic significance and benefits of delivering residential opportunities within Marulan. Accordingly, it is considered reasonable to conclude that this area of Marulan should be further considered as part of the draft UFHS investigations moving forward.

Should you wish to discuss this matter further, please do not hesitate to contact the undersigned.

Regards,



Ashleigh Smith
Associate
Willowtree Planning Pty Ltd
ACN: 146 035 707



15 December 2019

The General Manager
Goulburn Mulwaree Council
184-194 Bourke St
GOULBURN NSW 2580

Dear Mr Bennett

Submission – Urban and Fringe Housing Strategy

Urbanism has been engaged by Ganter Constructions to prepare the following submission to the draft Urban and Fringe Housing Strategy.

While Ganter Constructions welcomes the release of the draft for further comment, there are concerns with the quality of environmental analysis undertaken that informs the Strategy. This has, in our mind, misrepresented the cover of TECs on the Mistful Park urban expansion lands (Precinct 26).

Specifically, we note that the Strategy states as follows:

"The accuracy of the HEV mapping was questioned during the first Public Exhibition. As a result, OEH and ELA undertook a targeted validation in specific areas within the urban fringe."

In the subsequent *Goulburn Urban Fringe Housing Strategy Precincts – Biodiversity Constraints* report undertaken by ELA on behalf of OEH we note that the 'targeted validation' took the form of a "rapid visual validation". This is defined in the report as follows:

*"The validation was carried out from accessible public roads adjoining the identified Precincts. The purpose of the validation was to **visually identify** and update the **existing mapped** vegetation data with any gross inconsistencies. **No detailed survey was carried out** over the Precincts."* (emphasis added)

This approach is significantly inferior to the detailed on-site field surveys undertaken by Woodlands Environmental Management in consultation with Council's Environmental staff in August 2017. The purpose of these environmental surveys was to inform the preparation of a planning proposal that Ganter Constructions had been in discussing with Council's Strategic Planning Team. The methodology for this field work was described in the final report as follows:

A preliminary assessment of the subject site was undertaken (10th July 2017) to identify the nature and extent of vegetation, and to determine suitable sites for detailed survey, which was undertaken on 26th July 2017.

Urbanism Pty Ltd
ACN 130 715 436
L 40, 100 Miller Street
Phone: (02) 9053 7373
www.urbanism.sydney

"The flora survey was undertaken using quadrats, random meanders and targeted searches for Threatened Species. Two quadrats were surveyed within remnant Yellow Box - Blakely's Red Gum grassy woodland, with additional random meanders. Surveying within highly modified and disturbed vegetation was undertaken using random meanders."

The outcome of this detailed field work was illustrated in the following map contained in the report prepared by Woodlands Environmental Management:

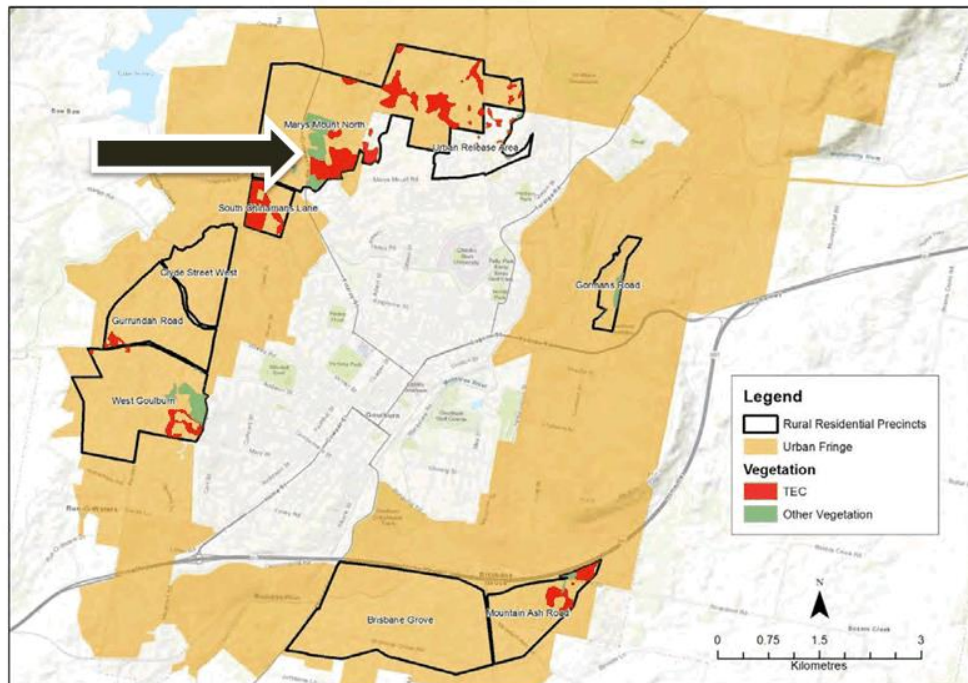


Source: SIX Maps

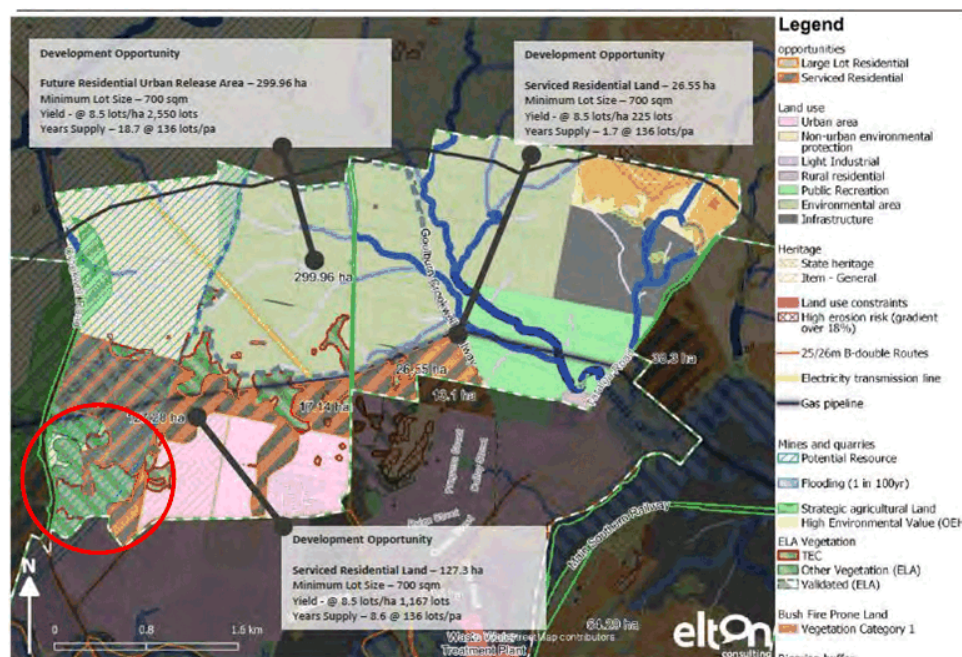
A – Yellow Box - Blakely's Red Gum grassy woodland
B – Highly modified and disturbed vegetation

This informed the planning proposal proposing to rezone the site to R2 Low Density Residential with a minimum lot size of 700m².

However, under the 'rapid visual validation' (an inferior and high level methodology) undertaken by ELA for the OEH, all but the entire site has been identified as containing TECs or HEV land. See the following map:



The problem with relying on this inferior methodology to inform specific sites in the Urban and Fringe Housing Strategy is that it causes the following interpretations to be made as seen on Page 119 of the Draft Strategy:



While it is noted and acknowledged that the Draft Strategy recommends that, the Precinct 5 Middle Arm West area, that the subject site forms part of in this rendition of the Strategy is to "Rezone land immediately adjoining the existing urban fringe in the short/medium term to urban residential", the recommendation also causes ambiguity by recommending that the Precinct is a "Long term development opportunity subject to a detailed masterplan".

It is requested that:

- a) The draft Strategy acknowledges Council's Resolution of 6 March 2018 in relation to the Mistful Park Urban Expansion Lands Planning Proposal (Precinct 26 formerly and now Precinct 5) which states:
 2. ***The Planning Proposal to rezone the 'Mistful Park' property is supported in principle but deferred at this time pending the outcome of the Urban & Fringe Housing Strategy.***
 3. ***The Planning Proposal to rezone the 'Mistful Park' property be included on a list of properties to be considered in the Urban & Fringe Housing Strategy and the applicant be encourage to investigate the concerns raised by the State Government Departments***
- b) The draft Strategy is corrected to acknowledge the more rigorous environmental field work that has already been undertaken by Woodlands Environmental Management in direct consultation with Council's environmental and Strategic Planning staff in 2017. Further, that environmental overlays contained in the draft Strategy are corrected to identify the site as being subject to detail site surveys already undertaken by the landowner in consultation with Council staff.
- c) That the draft Strategy specifically identifies Mistful Park Urban Expansion Lands Planning Proposal as substantially progressed and proponent-led and that a report

recommending its progression to the NSW Department of Planning Industry and Environment LEP Gateway be received for Council's consideration along with the draft Strategy so that the detailed environmental assessments and pathways can be progressed with OEH.

Thank you for bringing this draft Urban and Fringe Land Study to finalisation. We hope that the long delays in the assessment of our planning proposal lodged more than 2 years ago can now be progressed without further delay.

Kind regards



Wesley Folitarik
B. Environmental Planning (UWS); M. Property Development (UTS)
Managing Director | Urbanism



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6 December 2019

Attention: Kate Wooll
Business Manager Strategic Planner
Goulburn Mulwaree Council
85 Deccan Street
Goulburn NSW 2580

cc: Mr Warwick Bennett, General Manager

Dear Kate

RE: DRAFT URBAN AND FRINGE HOUSING STRATEGY
SUBMISSION ON BEHALF OF GORMEN PTY LTD, GLENROCK PROPERTY (248
HIGHLAND WAY MARULAN Lot 204 DP 870194, Lot 1 DP 1174575, Lots 5,6,7 DP
855762) (Glenrock)

Thank you for your time on the telephone on Wednesday 4 December 2019.

As foreshadowed, we now provide our further submission regarding Council's *Draft Urban and Fringe Strategy* (**Strategy**). It is made in support of including in the Strategy the small section of Glenrock property immediately adjoining the area of land on Highland Way.

Our client does not make any submission at this time in respect of that section of the Glenrock property which abuts Long Point Road. Therefore, this submission is made only in respect of inclusion of that section of the Glenrock property which immediately adjoins the neighbouring land already included in the Strategy as identified in the map included in this submission under the heading '**Relevant Glenrock land**'.

Our earlier submission

Our initial submission was provided on 21 February 2019. That submission was a response to Glenrock's omission from the Strategy and the oral advice provided to the writer by Council that all land east of the Hume Highway would be excluded from the Strategy. It set out our concerns in arbitrarily omitting, based on the delineation of the Hume Highway, large areas of land well suited to redevelopment from the Strategy, especially in the context of increasing demand and other approved developments east of the Hume Highway. It also sought inclusion of appropriate sections of the Glenrock property within the Strategy and set out the basis for that and the reasons in support.

As our earlier submission detailed, sections of the Glenrock property (along Highland Way) meet the necessary criteria for being included in the Strategy and in particular for rural redevelopment. Many of the reasons for that detailed in our earlier submission have also been confirmed in the response to our earlier submission.

Post Exhibition Review Report

On 1 October 2019 a report was prepared by Council's senior management team entitled *Draft Urban and Fringe Housing Strategy – Post Exhibition Review*. That report

did not acknowledge that a submission had been made on behalf of the Glenrock property and its owner and the report therefore failed to have regard to any of the matters in our submission. That omission was dealt with by the report being pulled from the Council's 1 October meeting with the matter being deferred for consideration at a later time. While grateful that the matter was dealt with in that way, it is of concern to our client that its submission and its objections to being excluded from the Strategy were ignored.

Current status (consultant reporting)

We have reviewed in detail all of the materials now provided by Council for public exhibition.

To broadly summarise the position: those materials indicate support, without any reasons articulated, for the position that the Strategy exclude land east of the Hume Highway. Indeed, if one read only the 50 or so page summary – which we suggest most people will do rather than reading the 300 page actual report – that is the impression one would have.

Then, in the detail of the 300 or so page Elton Consulting report it becomes apparent that not all land east of the Hume Highway is being excluded: there is one identified area of land, comprising 4 lots, which is included. Moreover, that land has been identified as High Priority meaning a supply lead of 12 to 18 months. Leaving aside the inherent contradiction in the reporting, this and the factors below, raise some concerns for our client, Glenrock and the community.

The relevant land:

- (a) is stated to comprise 85.5 hectares;
- (b) has been identified as suitable for inclusion in the Strategy as large lot residential development i.e. 2 hectare parcels of land;
- (c) is stated to have a capacity of 30 such dwellings and parcels;
- (d) has been identified as 'High' priority so as to be made available in 12 to 18 months; and
- (e) is not only east of the Hume Highway: it directly abuts and immediately adjoins the Glenrock property. Moreover, it has the exact same topographical, ground coverage and other characteristics as the Glenrock land which it adjoins.

The Elton report speaks of stakeholder consultation and engagement yet at no time was there any attempt to consult or engage with this office or Glenrock despite our early and consistent engagement with Council and our detailed February submission. Put simply, we consider that the report is deficient insofar as its inclusion of the land east of the Hume Highway immediately adjoining Glenrock and its simultaneous failure to include the section of Glenrock land which has exactly the same characteristics.

That said, the Elton report represents merely the current status of consultant reporting. The final decision rests with Council and we therefore seek inclusion within the Strategy of a small portion of the Glenrock property on the same basis as the land immediately adjoining Glenrock referred to above.

Reasons in support (February)

The reasons in support of this were stated in our February submission as:

- (a) Close proximity to both Tallong and Marulan villages (less than 5 minutes drive to either).
- (b) Close proximity to the existing rural residential lots near and around both, and also along each of Highland Way and Long Point Road. Equally close proximity to the various rural housing redevelopments which have been approved in the immediate and surrounding locale (such as Glenrowan Green which is less than 5 minutes drive).
- (c) Substantial dual road frontage both on Highland Way and Long Point Road enabling direct access to and from lots without the need for an additional public road system.
- (d) Ability for direct provision of services to residential lots, again without a requirement for an additional public road system.
- (e) Relevant land is already cleared of vegetation enabling development to occur without damage to or interference with vegetation, natural species or flora or fauna.
- (f) Commensurate low bushfire risk on the subject land due to its cleared nature.
- (g) The property is a natural growth corridor servicing both Marulan and Tallong and associated villages by virtue of its location and noting that Marulan has already been identified as a future growth area.
- (h) On both Highland Way and Long Point Road (and adjoining roads like Caoura Road) there are already a substantial number of rural residential developments so redevelopment of the defined area for Glenrock would be consistent with the existing character and use of the area.
- (i) Close proximity to the established main southern railway line with existing station infrastructure at both Marulan and Tallong allows easy and effective access to transport into the Sydney CBD and other satellite developments.
- (j) The existing single ownership structure means the land can be cohesively and efficiently subjected to the assessment process without the inherent waste and diffusion of resources that result from the more usual situation where subject land is held by a number of owners.
- (k) The ability to meaningfully add to the increasing demand for more housing stock in a manner which provides a first-class land release which therefore provides a public benefit without any public or environmental detriment (given the release would be consistent with existing land use and the existing character of the location, and given the nature and character of the land itself as referred to above).

Those reasons have not changed. They are factually correct and consistent with the planning criteria, as demonstrated by the inclusion now of the 85.5 hectares of land immediately adjoining this section of the Glenrock property referred to above.

Further, the above reasons have been added to and supplemented by the reports provided on the Strategy and otherwise as detailed below.

Further support within the Strategy reports

In addition to the reasons stated above, the strategy reports also demonstrate and justify the need for additional rural residential development of the type identified above

on the relevant section of the Glenrock property, including in the following specific references:

Page 7 – Item 3, Housing Demand:

“Anecdotal evidence gained through the initial community and stakeholder engagement process indicated demand for large lot residential blocks (2ha). These products offer diversity in lifestyle choice. The relatively low subdivision costs associated with creating these lots has resulted in this form of development being the preference of proponents looking to rezone land. Given the current and expected demand for residential land in Goulburn and Marulan it would be anticipated that small volumes of large lot residential land will be absorbed by the market, however, the actual annual demand is difficult to determine.”

Page 9 – Item 4.2, Large Lot Residential Demand:

“The overall dwelling approval data has not been sensitised for the split between approvals on 1 - 2ha large lot residential lots, compared to approvals for serviced residential lots. However, a review of Council data suggests that there is reasonable demand for rural residential development on the fringe of the study area.”

Page 9 – Item 5.1 – Large Lot Residential Supply:

“Based on the current data, 290 lots have been created in the R5 Large Lot Residential zone in the past ten years in Goulburn. Over this same period, approvals have been granted for 200 dwellings. This indicates that there are at least another 90 vacant lots in the R5 zone. Based on the historic conversion or take up rate (lots to approved dwellings) of 20 per annum, this would suggest around 4.5 years supply of large lots in Goulburn...Marulan has a much more limited supply of R5 Large Lot Residential zoned land.”

Page 12 – Item 5.2.2 – Marulan

“Marulan will need to ensure that sufficient land is identified and preserved for future urban residential zoning. Council could consider rezoning this area with an Urban Release Area provision and concept plan that demonstrates the arrangement of larger lots (>2 ha) such that they can be efficiently re-subdivided in the medium/long term.”

Additional reasons in support since February and consistency with the Strategy

Since February a range of additional reasons in support of Glenrock's inclusion have arisen, beyond those specific report sections referred to above. They include:

Consistency with Strategy

Inclusion of the relevant Glenrock land immediately adjoining the 85.5 hectares already included is consistent with the Strategy and is supported by all of the reasons stated. With respect we do not agree with your comment that our client is in the same category as people who own land in Goulburn who are asking to be included in the Strategy. The Strategy now includes land east of the Hume Highway which has only recently been included and which immediately adjoins our client's land. It is the same in topography, access and all other characteristics as our client's immediately adjoining land. There is simply no similarity or relevance to the analogy stated of being the same as landholders located in Goulburn wanting to be included.

Not undermining future residential land opportunities

Inclusion of the relevant section of the Glenrock property within the Strategy on the same basis as the 85.5 hectares already included would not undermine future residential land opportunities. On the contrary, it would augment them.

Absence of land use conflict

The development can be managed to avoid land use conflict. Large Lot development should have regard to the surrounding agricultural land use and must provide a buffer to agricultural land. The railway is a definitive boundary between the large lot residential development proposal and the rural land to the south which is used for agricultural purposes.

No flooding

The site is unconstrained by flooding as it is above the flood planning level of the 1 in 100 ARI. The area is not affected by flooding and has unconstrained flood free access out of the property and locality.

Connection to existing road network

The lots can be connected to the existing road network by sealed road access. The area can be connected to the existing sealed road network by sealed road access and is fully serviced by a sealed road and within the existing rail corridor.

Demand

The need for the additional lots can be justified in terms of supply and demand especially given the long term nature of the Strategy. This is already demonstrated clearly by the identification of the immediately adjoining 85.5 hectares as 'High' priority.

Council retains control

No development may occur on any of the subject land without the provision of a comprehensive planning proposal to Council and without Council consent. Any such proposal would need to be assessed against the Strategy, the relevant controls and Council's processes and criteria at that future time and Council would need to provide its consent before the proposal were able to be advanced to the Department of Planning. Without Council support at such future time such a proposal would not be able to be advanced. Council therefore retains control and loses nothing by including the relevant portion of Glenrock land along Highland Way within the Strategy – on the contrary, Council will be ensuring that the area east of the Hume Highway already identified as suitable for inclusion in the Strategy as high priority will actually represent a meaningful contribution to future land use rather than only the 30 additional lots currently identified. After all, if those lots are 'High' priority, it must follow that lots of exactly the same nature immediately adjoining them are also necessary and desirable.

A meaningful number of lots

By including the relevant portion of the Glenrock property within the Strategy Council will be ensuring there is a meaningful number of lots available in the subject area already included within the Strategy, rather than only 30. This will alleviate supply pressure given the identification of the relevant area as 'High' priority.

Practical utility: cost and efficiency

From a practical perspective, there is a real utility to including the Glenrock property along Highland Way identified in this submission: the cost of preparing the type of planning proposal required for redevelopment as residential rural lots will be substantial, requiring a range of consultants, experts and planners. The cost of infrastructure in terms of roads and otherwise in relation to any actual development will also be substantial. Therefore there is a natural economy of scale and efficiency in ensuring that this work is undertaken across a range of owners and in ensuring that any redevelopment has a consistent rather than fragmented appearance along Highland Way.

Adverse impact by exclusion of relevant portion of Glenrock property

To exclude that portion of the Glenrock property along Highland Way identified in this submission would result in a completely out of character mishmash of developed and undeveloped land along the exact same section of Highland Way. That will be an unsightly blight on an otherwise pristine rural setting, made worse by the contrast of redeveloped land immediately next to rural land. If there is going to be redevelopment it should occur in a cohesive, disciplined and consistent way in respect of land in the same location, with the same characteristics and topography and with the same appearance from, and frontage to, Highland Way.

Community benefit must be placed above developer opportunism

The entity which owns Glenrock has been part of the community for over 35 years. During that time it has invested a sum of over eight figures directly into the community and its businesses through the meticulous restoration of the Glenrock homestead and buildings and the deliberate decision to source all property requirements, including for Glenrock's substantial agribusiness, entirely to local businesses and suppliers. While it and its directors generally prefer a low key approach they are also not averse to becoming personally involved where they consider the benefit of the community requires it, two recent examples being the proposed development along Highland Way which went to the Land and Environment Court and the recent proposal in respect of Tallong Dam which was resolved privately.

The point is simply this: by including Glenrock within the Strategy Council will be ensuring that an owner with real ties to the community and involvement in it will be actively engaged in ensuring that any redevelopment will be properly and scrupulously proposed and undertaken in a manner sympathetic to the community and in a quality manner without cutting corners. The likely alternative if Glenrock is omitted is that the size and scale of investment required will see smaller holders sell to developers whose incentive and focus will be only on making a profit. That would be a poor result for the community and one Council can ensure is avoided by including in the Strategy the relevant section of Glenrock identified in this submission.

'High' priority and the issue of demand

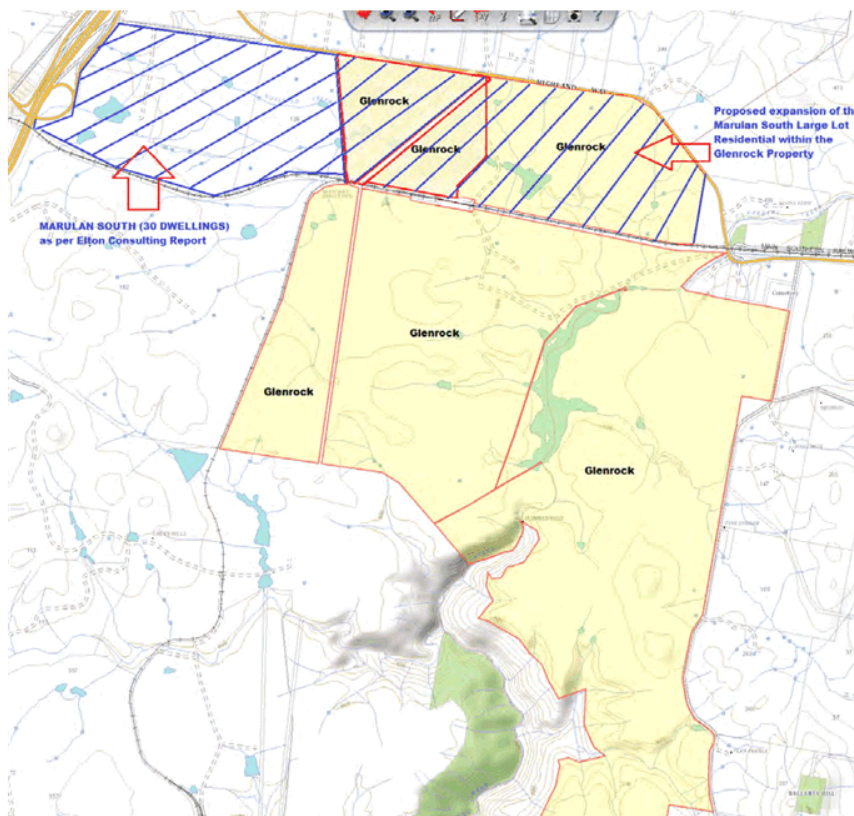
This is an issue which requires some emphasis: the relevant report indicates, correctly in our view, that future demand is difficult to determine. But, the one thing which we do know (and this is a view accepted not only in this region but in the whole of New South Wales), is that housing demand will increase in the future. The Strategy is not a strategy for 5 years. It is a long term strategy stretching out at least 15 years.

It makes no sense to say on the one hand that the release of 30 residential rural lots (of 2 hectares each as identified above) is 'High' priority and, on the other hand, to say that the land immediately adjoining it on the Glenrock property – which in all respects has the same attributes and characteristics – should be excluded from the Strategy.

The simple fact of the matter is this: if the 85.5 hectares of land immediately adjoining Glenrock is not only a necessary part of the Strategy but a High Priority component – as the Elton report states that it is – then the Glenrock land immediately adjoining it identified below must be as well.

Relevant Glenrock land

The relevant portion of Glenrock land which we and our client submits be included in the Strategy is defined below. We submit it should be included for all of the reasons above and on the same terms and same basis as the land already included, which is immediately adjoining it and also clearly identified below.



Progression

Inclusion of this portion of the Glenrock land is a beneficial and sensible course which is value-accretive to both the Strategy and the community as a whole.

We look forward to progression of this matter to a positive and productive outcome.

DENIS SMITH
PRINCIPAL & DIRECTOR
TOMASY PLANNING

T & T Equity Pty Ltd

5 December 2019

Goulburn Mulwaree Council
Locked Bag 22
Goulburn NSW 2580

Dear Sir/Madam,

Draft Urban and Fringe Housing Strategy - Submission

We are the owner of 152-194 Brayton Road, Marulan being Lot 1 in Deposited Plan 780918 and lodge this submission in general support of the Draft Urban and Fringe Housing Strategy (the Strategy).

With particular reference to the categorization of our property as a “development opportunity” in the context of a possible future residential zoning within the Marulan North Precinct we note our specific support for this designation and our preparedness to participate in or independently prepare a planning proposal to achieve a residential zoning for our property in the short term that may facilitate an orderly and staged development of our property consistent with the objectives of the Strategy and as the market and community may allow.

In relation to specific content within the Strategy we refer to “Figure 3 Marulan North opportunities” and note:

- the orange and grey shading designating residential land opportunities omits the north western most corner of our property; and

T & T Equity Pty Ltd

- the comment overlaid on Figure 3 “Consider rezoning with an URA and concept plan that demonstrates the arrangement of larger lots (>2ha) such that they can be efficiently re-subdivided in the medium/long term. A flood assessment will be required to support rezoning.”

We propose Council consider an amendment to “Figure 3 Marulan North opportunities” (and elsewhere within any part of the Strategy to ensure consistency) to:

- also shade the north western corner of our site in orange and grey identifying that remnant section also as “development opportunity” in the context of a possible future residential zoning; and
- that the overlaid comment be amended to “Consider rezoning with a URA and concept plan with a minimum lot size of 700sqm other than where constraints, such as flooding determined by a current flood assessment, may necessitate larger lots.”

The proposed further shading across the north western corner of our property and proposed overlaid comment amendment may assist to ensure:

- remnant historical zonings are avoided should a rezoning of Marulan North proceed;
- greater clarity of the vision for lot size density where the current comment may be less clear referencing a minimum lot size of 700sqm for yield purposes whilst at the same time suggesting an interim >2ha configuration where a larger interim minimum lot size may lead to fragmentation of ownership; and
- a linkage of lot size density to a flood assessment and other constraints remains to provide a sufficient safeguard for orderly development.

T & T Equity Pty Ltd

Should the opportunity arise to discuss and advance any of the above points we would be pleased to meet with Council or otherwise take further steps to facilitate such.

Regards

Tod Anderson
Director

16 December 2019

General Manager
Goulburn Mulwaree Council
Locked Bag 22,
GOULBURN NSW 2580

Dear Sir,

REQUEST FOR INCLUSION
of land known as **17699 HUME HIGHWAY, TOWRANG (GOULBURN)**
in Council's **URBAN AND FRINGE HOUSING STRATEGY (Stage 2)**

Reference is made in relation to the Goulburn Mulwaree urban and fringe Housing Strategy (stage 2) currently on Public Exhibition to identify opportunities for future land releases including rural residential land.

The above-mentioned land ("the subject site") consists of six (6) lots known legally as; Lot 3 DP 581727; Lot 1 DP 733070; Lots 2 & 6 DP 747969; Lot 20 DP 806869; and, Lot 7 DP 1039599.

We hereby request Council to extend the Urban and Fringe Housing Strategy to include the subject site to reduce the minimum lot size.

- Rural residential lots with minimum lot size of 5HA around Riparian Corridors and 2HA in other areas (refer attached Proposed Lot size Sketch plan) to provide range of affordable lifestyle lots.

We believe that there is considerable justification for including the subject site in the Urban and Fringe Housing Strategy, such justification includes, but is certainly not limited to, the following.

- the subject site is well located - it has access from both the Hume Hwy (1.3km frontage) and Boxers Creek Road (1.5km frontage), and is in close proximity to the northern entry to / exit from Goulburn
- the subject site is right across the road from 420 Acres Industrial zoned land which will eventually be developed into Industrial hub / park.
- Electricity and telecommunication connections are readily available for extension into the subject site. An electricity easement traverses the subject site.
- the subject site is large enough to accommodate the environmental issues e.g. riparian corridors, biodiversity etc. There is no flood affectation outside riparian corridors on the subject site.

Please find below information to address the key issues Council outlined in "Site Assessment – Opportunity Sites" report dated 17 December 2018 for not considering the subject site part of stage 1 Housing Strategy.

Not Contiguous to Goulburn town:

Even though the subject site is not contiguous to Goulburn town, it is right across the road from 420 Acres of industrial zoned land which will be developed into industrial hub / park and the subject site would be ideal for people to live and work across the road. Also, any infrastructure investment to develop the industrial zoned land would be more cost effective to have development on either side of highway rather than just on one side.

Kentgrove South - Housing Strategy 16 Dec 19

Page 1 of 3

Economic indicators suggest that there will be growing demand for affordable rural residential lots from people living in Sydney who are considering tree change to Goulburn region, as Goulburn is only 90mins away from Campbelltown / Camden areas and the lot sizes are getting smaller and expensive in Sydney and its fringes.

Also, having mix of rural residential lots around the fringes of Goulburn along Hume Highway corridor with direct access to highway will cut down 10 to 15min travel time.

One of the key strategies of the Goulburn Mulwaree Community Strategic Plan 2030 is “to provide opportunity for residential and rural residential development and encourage affordable housing”.

It is understood from the local commercial and rural residential property consultant, Peter Mylonas, that the Industrial sector in Goulburn is very active and one of the industrial zoned parcels (80 Acres) across the road from the subject site has been sold recently and the same buyer is looking at buying other two parcels, the total area of 420 Acres. Further, it is understood that currently there is a lack of 2 to 5HA rural residential lots in Goulburn area for people wanting to live only in large rural residential lots to have country life style at affordable price range. (refer attached letter from Peter Mylonas Property Solutions).

Also, Section 3.0 (Housing Demand) of UFHS Draft Summary report dated 18 September 2019 notes that *“Anecdotal evidence gained through the initial community and stakeholder engagement process indicated demand for large lot residential blocks (2ha). Given the current and expected demand for residential land in Goulburn and Marulan it would be anticipated that small volumes of large lot residential land will be absorbed by the market, however, the actual annual demand is difficult to determine.”*

The subject site is within a 3km radius of the Precinct G-10 Mountain Ash identified for growth area in Urban and Fringe Housing strategy for 164 large lot dwellings.

Biodiversity:

The site is identified as “Biodiversity” on the Terrestrial Biodiversity Map Goulburn Mulwaree LEP 2009. It is understood that the Office of Environment and Heritage and Council are revising the map.

The “Biodiversity” identification potentially reflects the presence of some remnant vegetation on parts of the site.

We understand from the local Ecological consultant that in the Goulburn Mulwaree LGA, particularly in the periphery of Goulburn, the Terrestrial Biodiversity Map only broadly reflects the actual biodiversity values at any particularly location in the LGA. Indeed, the Terrestrial Biodiversity Map is often inaccurate when considered at the site scale and therefore it should be revised following field-surveys to appropriately ground-truth and map the biodiversity values of the subject land.

We have been advised by the Local Land Services back in August 2018 that,

“there is no sensitive land on this property - only vulnerable is the riparian protected area - see Map 2.

the land is a very cleared landscape and would be close to <10% vegetation cover - which would restrict most clearing activities besides the allowable activities”.

The subject site has very little conservation value given that it is highly modified grassy woodland and its prolonged grazing history.

There are no known ecological assets except for the riparian corridor on the site. There is a small amount of remnant vegetation on site. Impact on this can potentially be avoided by appropriate siting of houses and infrastructure.

flooding

There is no flood affectation outside riparian corridors on the subject site.

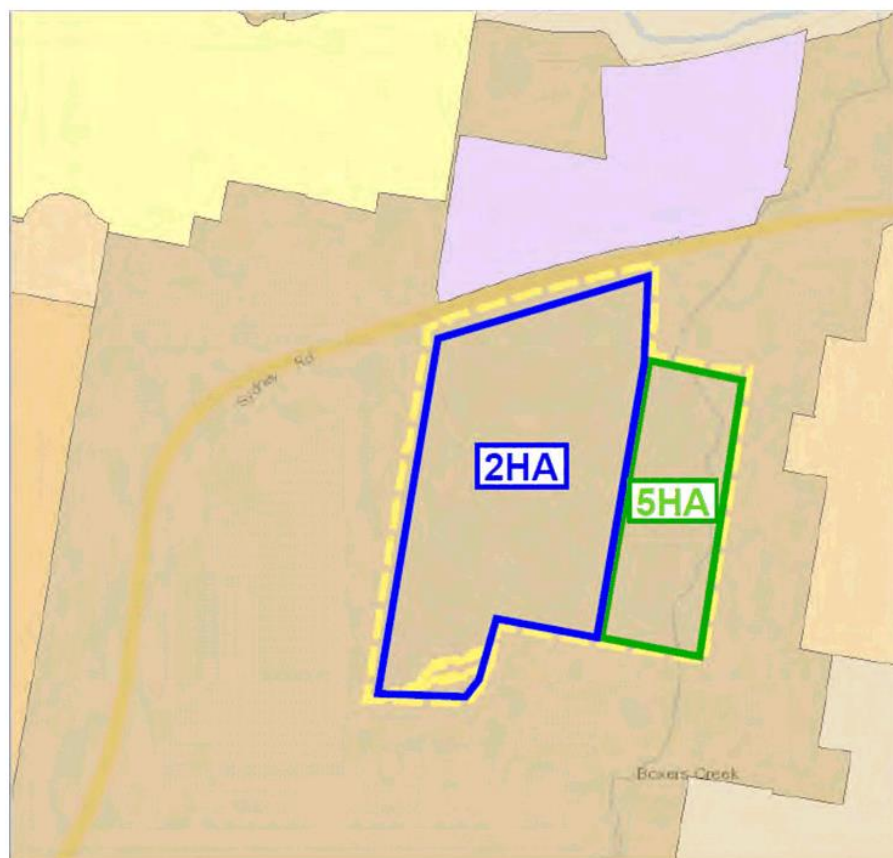
Accordingly, we hereby request Council that the Urban and Fringe Housing Strategy be extended to include subject site to reduce the minimum lot size to have mix of 2HA and 5HA rural residential lots.

If you have any queries or require further information from us for inclusion of the subject site in the Urban and Fringe Housing Strategy, please contact me on 0414 537269.

Yours Sincerely,

Suresh Guduguntla

*Attachments – 1) Proposed Lot size Sketch plan
2) Letter from Peter Mylonas Property Solutions
3) Local Land Services - Map 2*



17699 Hume Hwy Goulburn - Proposed Lot size Sketch plan



what's best for you!

PO Box 347 Goulburn NSW 2580
T 02 4821 1044
admin@mylonas.com.au
www.mylonas.com.au
ABN 1300 3480232

Dear Suresh,

As discussed, based on our experience, we believe that there will be lot of demand for rural large lot residential housing say around 2HA to 5HA parcels in Goulburn area in the near future for the following reasons.

The Industrial sector in Goulburn is very active, we are receiving many enquiries weekly wanting industrial land i.e. food manufacturing companies, engineering companies and transport companies. Reason being Campbelltown industrial land is selling for \$600-\$1000psm and if they do not need to be in that area, they are looking at Goulburn. Reports are also saying industrial lands will run out in 3 to 6 years.

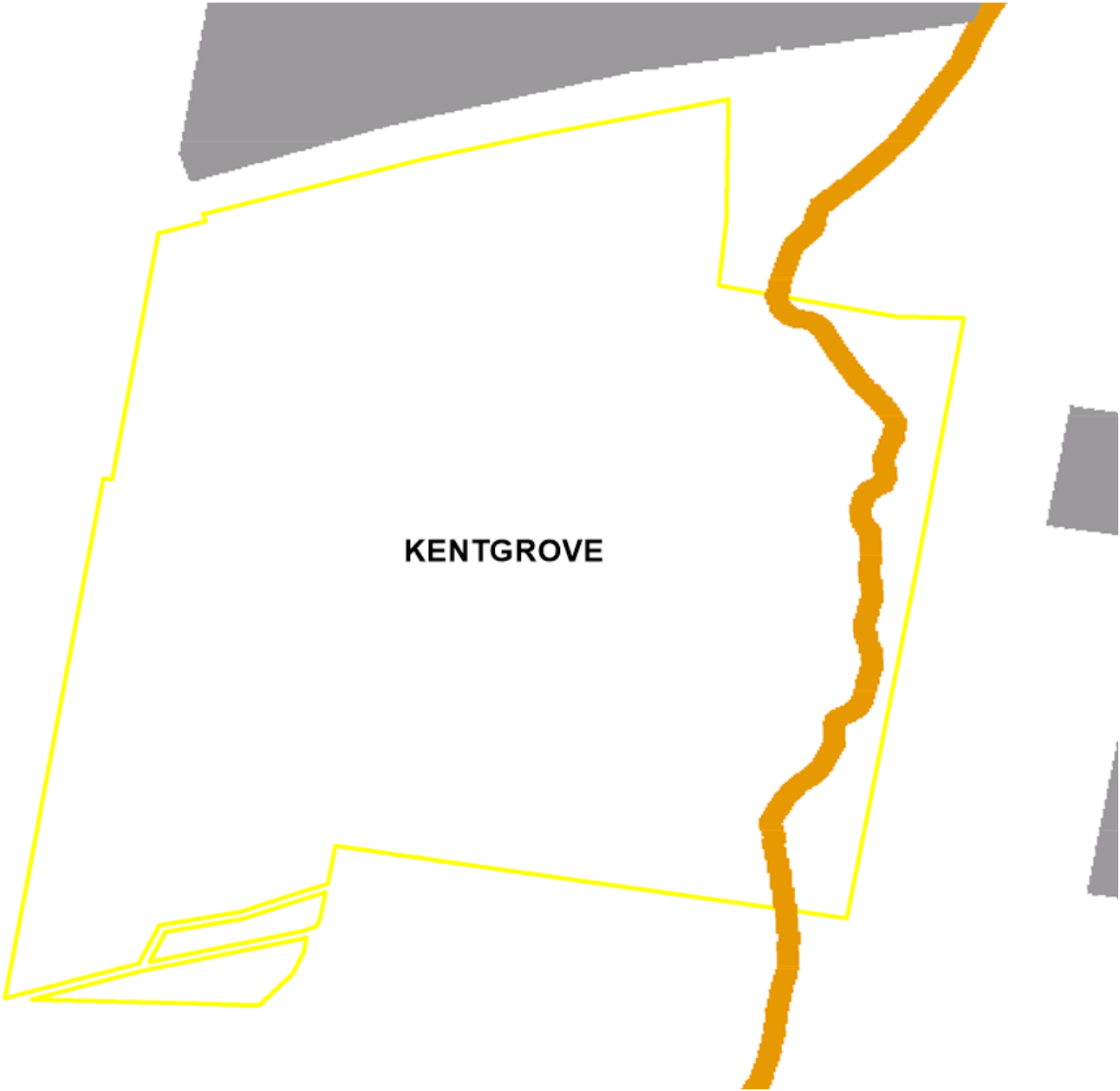
The site across the road from your land [17699 Hume Hwy Goulburn] zoned IN1 Industrial, the property 17658 Hume Hwy Goulburn [area 80 acres] has been sold recently. This Buyer will be looking to buy the other 2 properties next to this property, a total area of 420 acres. The development of these sites will generate many jobs and there should be plenty of growth in the area.

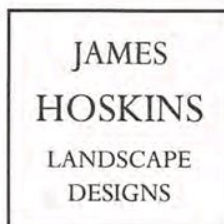
Currently there is a lack of 2HA to 5HA rural residential lots in Goulburn area for people wanting to live only in large rural residential lots to have country lifestyle at an affordable price range. I would suggest you see if you can rezone your land to rural large lot residential as your site would be ideal for people to live on your site and work across the road. Your site would fill a vacuum in this type of product range, rural residential housing, currently exists in Goulburn area.

Also there is a delegation from overseas who are looking at broad acreage sites for major development and also we have many investors and Corporations looking at Goulburn area, Based on this, I expect Goulburn area to continually grow at much faster phase and Goulburn area will be soon a sought after location.

Peter Mylonas

Director Commercial, Rural and Residential Sales Consultant





17th December 2019
The General Manager
Goulburn Mulwaree Council
Locked Bag 22 Goulburn NSW 2580

Draft Urban & Fringe Housing Strategy Submission confirmation

JH & EM Hoskins
PO Box 104
Goulburn NSW 2580

69 Gorman Road, Goulburn
Lot 11 DP 1044967

Dear Sir,

Please note our original submission dated 30th January 2019 is still current for the Draft Urban and Fringe Housing Strategy (Draft Strategy) and summarised below.

We support the Goulburn Mulwaree Council's housing strategy process that allows landowners and residents to have a say in the future planning and direction of good residential housing in and around Goulburn.

This submission to the GMC Draft Urban & Fringe Housing Strategy asks:

"That the Goulburn Mulwaree Council includes in the current Housing Strategy proposal, that the existing RU6 land in Gorman Road be rezoned to provide for Rural Residential Development with a minimum lot size of 2ha."

'Gorman Road' residents and the decommissioned 'Goulburn effluent farm'

For all the Gorman Road land owners it is imperative that the now decommissioned farm land adjacent to Gorman Road is rezoned for compatible land use and not left for the Council to continually dump contaminated waste on. What happens to this council land will determine the future for all Gorman Road residences.

Gorman road resident land owners should be informed and included in the process of determining future land uses, rezoning and the sale of this council land.

Suggestion to expand Gorman Road Cemetery

GMC negotiate and purchase land on the western side of Gorman Road adjacent to the existing cemetery, making use of existing services and infrastructure.

All or part there of:- Lot 491 DP669162
Lot 1 DP111406
Lot 50 DP 750050

JH HOSKINS

Per JH & EM Hoskins

17/12/2019

LANDSCAPE CONSULTANTS : GARDEN DESIGNERS : FARM PLANNERS : PROJECT MANAGERS

Office: 69 Gorman Road, Goulburn

Phone: (02) 4822 1940 Fax: (02) 4822 2690

Mobile: 0427 482 195 E-mail: jameshoskins@bigpond.com

Postal Address: PO Box 104

Goulburn NSW 2580 Australia

ABN 61 505 925 316

BALLINLUIG

62 FOORD Rd
GOULBURN 2580
16/12/2019

Mr Warwick Bennett

General Manager
Goulburn Mulwaree Council
Locked Bag 22,
Goulburn NSW 2580
Via email: council@goulburn.nsw.gov.au

Dear Mr Bennett

Goulburn-Mulwaree Urban and Fringe Housing Strategy Submission

Thank you for the opportunity to make this submission associated with the development of the Goulburn Mulwaree Council Housing Strategy for Goulburn and Marulan dated 18th September 2019.

We note the Run-O-Waters precinct has been identified as a high priority area for future residential development. We support the recommendations in the most recent exhibited strategy document for Precinct 2 Run-O-Waters (rural north) in particular;

- The proposal to rezone to R2 Low Density Residential Development with a minimum lot size of 700 sqm in the short term as per opportunities map.

The Run-O-Waters precinct has convenient road access and nearby infrastructure to enable efficient development of the land.

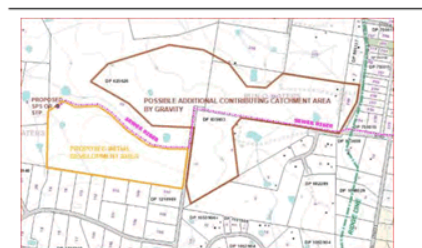
Services.

- **Water**

The site has 2 existing connections to town water from the Ridge Street reservoir, and has a 1300 metre frontage to the water main providing water to the Run-O-Waters subdivision.

- **Sewerage**

Goulburn Mulwaree Council have recently upgraded the Goulburn STP to accommodate up to 30,000 equivalent person (ep) with capacity to accommodate 40,000ep with augmentation and therefore a sewerage pumping station (SPS) is a viable option in the Run-O-Waters precinct.



The preferred option to service the site is the construction of a sewerage pumping station (SPS) and to connect the rising main to a receiving manhole to be connected to the existing sewerage system on the eastern side of the ridge line. There are number of locations where this can be achieved the most logical of which is the sewer system in Mary Street just south of the intersection with Slocombe Street. The SPS can be sized for any future contributing areas such as the additional lots created through the development of Lots 337 & 268 of DP750015 and a portion of Lot 4 DP835933. The map above shows the approximate area that could be serviced by a gravity pipe system to the suggested SPS location.

- **Telephone and Internet services**

An easement for services benefiting lot 10 DP 625626 is being created as part of a re titling of Lots 337 and 268 DP 750015 following Council's acquisition for road works associated with the Mary Street extension. This corridor (trench) will have the capacity to run optic fibre or similar for telephone / NBN Internet Services for the benefit of the development.

- **Power**

Electricity can be provided through augmentation of existing systems, to the various stages of future development. Being a green field site, there will be a number of opportunities to incorporate renewable energy opportunities into future development.

Traffic

- **General Traffic**

The future development of the Run-O-Waters precinct including, Lot 10 DP 625626 and adjoining lands, will provide a more desirable traffic route to the centre of Goulburn.

An alternate access has been proposed for Run-O-Waters under a Precinct Future Traffic Management Plan undertaken by Council. On completion of the alternate access, there will be a more desirable traffic route to the centre of Goulburn. This would have a significant positive impact on the number of vehicles using the intersection of Pockley Road and Ducks Lane as well as the use of Ducks Lane and Hume Street.

Connectivity of the Run-O-Waters precinct to the Centre of town and the Hume Highway is superior to other development fronts to the north of Goulburn. Travel times via Fitzroy, and Chantry / Union Streets, are hampered by several school zones along these routes, with limited opportunity to improve the level of service of these major arterial roads, as demand increases.

- **Emergency Access**

The current emergency access from Run-O-Waters is considered by residents to be insufficient. Further development in the Run-O-Waters precinct has the capacity to provide safer and more direct access to the locality.

Two emergency access and egress gates for Run-O-Waters were installed during 2017 for the existing Run-O-Waters development, at Greendale Crescent and Carr Street. The gates were designated for emergency purposes only and operate under the supervision of the local Emergency Operation Centre when required.

Water Management

Water NSW had assessed the Water Cycle Management Study and associated MUSIC stormwater quality model for a proposed 92 Lot subdivision over the southern parts of Lot 10 DP 625626. 3.75 hectares of road pavement were proposed in a development over 30 hectares in size. Water NSW considered that the proposed stormwater management measures for the future concept 93-lot subdivision were likely to meet neutral or beneficial effects on water quality.

Environmental Constraints

We encourage Council to recognise the environmental constraints within the Run-O-Waters precinct. These include an endangered ecological community (Tableland Grassy Box- Gum Woodland), Riparian and Wildlife corridors. With thoughtful planning these constraints can be turned into an environmental benefit for the precinct, without unreasonably burdening the affected lands.

- **Riparian Corridors**

Riparian corridors are areas of conservation value. Protection, restoration or rehabilitation of vegetated riparian corridors is important for maintaining or improving the shape, stability (or geomorphic form) and ecological functions of a watercourse. All forms of wood lands and riparian corridors provide the means for wildlife to move through the precinct.

- **Biodiversity Stewardship Sites**

Encouraging the establishment of Biodiversity Stewardship Sites under a formal Biodiversity Stewardship Agreement (BSA). A BSA would provide permanent protection for the identified Box-Gum Woodland and provide upfront and ongoing payments to the landholder to undertake conservation-focused management actions.

- **Limit any further development along Northern boundary of existing Run-O-Waters development***

These lots are essentially fully developed and set back from their northern boundary by 60 or more metres, providing a established buffer between any future development and at the same time complimenting an existing established wildlife corridor.

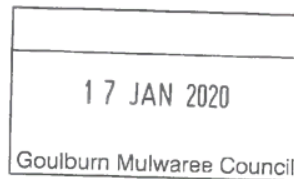
Some of these owners have expressed a desire to maintain a rural outlook, which can be retained if there is no alteration to lot size or future development allowed along the northern boundary of the existing Run-O-Waters development.

** Lots 107, 109 & 110, 112, 113 DP1218989 & Lots 18:22*

Yours sincerely

Stewart Thompson

As Trustee Marama Superannuation Fund.

**SCANNED**

20 Clifford Street
PO Box 142
Goulburn NSW 2580

T: 02 4822 1366

F: 02 4822 1365

E: admin@sccssurveyors.com.au

Your Ref:

Our Ref:

15 January 2020

Attention: Kate Wooll

The General Manager
Goulburn Mulwaree Council
Civic Centre
Bourke Street
GOULBURN NSW 2580

Re: Draft Urban and Fringe Housing Strategy - October 2019 Review
Site Address: 407 & 457 Crookwell Road, Goulburn
Subject Lands: Lots 70 & 73 DP1006688

We refer to the above and wish to make a further submission on behalf of the owners of the subject lands, the Parlett and Murray families, in relation to the above-mentioned strategy. For reference, our previous submission of 21 February 2019 is attached.

Our clients have been jointly making submissions to Council since 2008 in order to rezone their lands to enable urban residential subdivision. In so doing, considerable effort and expense has been undertaken to demonstrate the suitability of the subject lands for urban residential subdivision.

We note in the *Urban and Fringe Housing Strategy - Post Exhibition Review* prepared by Elton Consulting and dated 2 October 2019 that response to our submission dated 21 February 2019 was supportive of the subject site being suitable for future urban expansion for 'short to medium term release' but for mapping which identified that the site as being mapped as biophysically strategic agricultural land (BSAL). BSAL lands are lands with unique soil, water and land characteristics which have high agricultural value to NSW.

Subsequent investigations and inquiry indicate however that the application of BSAL mapping is relevant only to the gateway process for mining and petroleum development under *SEPP (Mining, Petroleum and Extractive Industries) 2007*. In this respect, the application of BSAL mapping relating to a proposed change in zoning from rural to urban is not appropriate.

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It is noted that a proposal for new urban development on rural or agricultural lands (irrespective of whether it has been identified as BSAL) is required to address the requirements of Ministerial Directions appurtenant to *Rural Zones - Section 1.2* and *Rural Lands - Section 1.5* such directions being issued under Section 9.1(2) of the EP&A Act 1979. Any inconsistencies with these directions will need to be justified via a strategy that is endorsed by the department. In this respect, however, the *draft Urban and Fringe Housing Strategy* provides justification for the proposed urban rezoning of the Sooley Precinct which includes the subject lands. Such justification relates to the close proximity of the site to Goulburn and the ability of the land to be serviced.

The subject site is not isolated and adjoins land on the eastern side of Crookwell Road which have been identified for *short term urban release*. It is anticipated that the site is capable of a lot yield in excess of 200 lots containing areas of not less than 700m². In area, the development site mirrors recent subdivision precincts in Goulburn, known locally as Mistful Park, Teneriffe, Belmore Estates, Monastery Gardens, The Tillage and Joseph's Gate. These developments have been highly successful and have met local market demands.

In light of the above, and in particular to the interpretation of BSAL requirements in the draft strategy, it is our clients' submission that the subject site can be proposed in the '*short to medium urban release*'. We seek Council concurrence to this outcome.

Yours faithfully

SOUTHERN CROSS CONSULTING SURVEYORS



Consultants in Surveying, Planning, Mining, Mapping, Engineering and Project Management



20 Clifford Street
PO Box 142
Goulburn NSW 2580

T: 02 4822 1366

F: 02 4822 1365

E: admin@sccsurveyors.com.au

Your Ref:

Our Ref:

21 February 2019

Attention: Kate Wooll

The General Manager
Goulburn Mulwaree Council
Civic Centre
Bourke Street
GOULBURN NSW 2580

Re: Draft Urban and Fringe Housing Strategy
Site Address: 407 & 457 Crookwell Road, Goulburn
Subject Lands: Lots 70 & 73 DP1006688

We refer to the above and wish to make a submission on behalf of the owners of the subject lands, the Parlett and Murray families, in relation to the above-mentioned strategy.

Our clients have been jointly making submissions to Council since 2008 in order to rezone their lands to enable urban residential subdivision. In so doing, considerable effort and expense has been undertaken to demonstrate the suitability of the subject lands for urban residential subdivision.

We note that the purpose of the strategy is to identify opportunities for future urban development in the Goulburn and Marulan urban areas and that an objectively based approach has been adopted to identify constraints and attributes of lands suitable for urban expansion. Our clients' lands have been included in the proposed Goulburn urban release area.

Whilst the subject lands have been designated for '*future urban expansion*' in the strategy, adjoining lands on the eastern side of the Crookwell Road have been proposed as '*short to medium term release*'. Our clients consider that their lands should also be included as '*short to medium term urban release*'. We have highlighted the position of our clients' lands on the plan note as Figure 1 in the draft *Urban and Fringe Housing Strategy* - refer Appendix 'A'.

The subject lands adjoin existing urban development on part of their southern and eastern boundaries. Services have been extended to the boundaries of the site as a result of this current urban expansion - this is not necessarily the case for the area

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identified for *'short to medium term urban release'*. Indeed, our clients' lands are located closer to the city centre and not as distant from existing infrastructure. The inclusion of the subject land in the *'short to medium urban release'* program provides opportunity for services to be extended along the Crookwell Road to the proposed *'short to medium term urban release'* area in a more orderly and planned process. This would appear to be a responsible and logical outcome.

There have been concerns raised about constraints including the Sooley Dam catchment and the natural gas pipeline. We understand that Council are making their own inquiries with appropriate authorities about the gas pipeline. The pipeline passes through the proposed urban release areas on both sides of the Crookwell Road. In this respect, it is submitted that our clients' lands should not be considered as unsuitable for inclusion in the *'short to medium term release'* on this basis.

The subject lands are located outside the Sooley Dam catchment. In this respect, stormwater falling on the site flows away from the site in a southerly and easterly direction as opposed to flowing into the Sooley Dam - refer contour plan attached as Appendix 'B'. There is thus no impact on Sooley Dam water quality of urban development upon the subject lands.

General comments with reference to the Site Assessment sheet prepared by *Elton Consulting* are itemised in the attached Appendix 'C'.

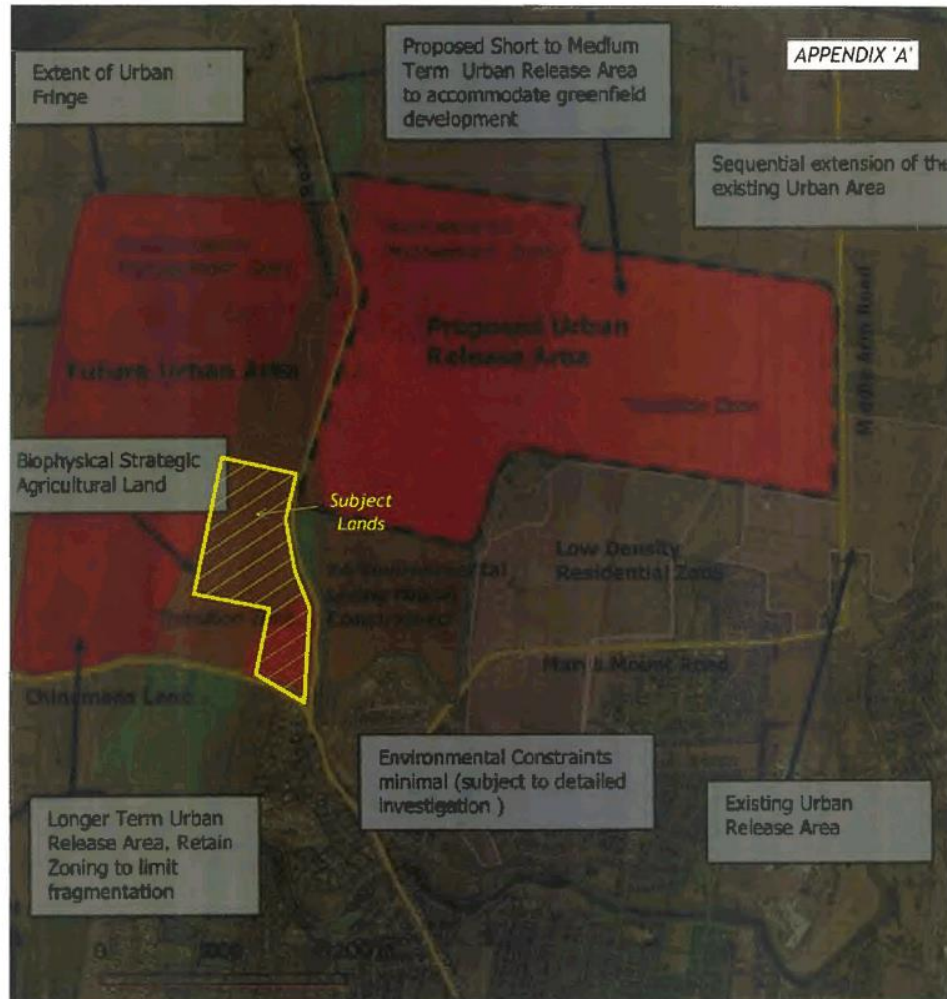
The subject lands possess appropriate attributes required for urban development. Together with these attributes, and its close proximity to Goulburn, it is submitted that the subject lands be included as part the *'short to medium term release strategy'* area.

Yours faithfully

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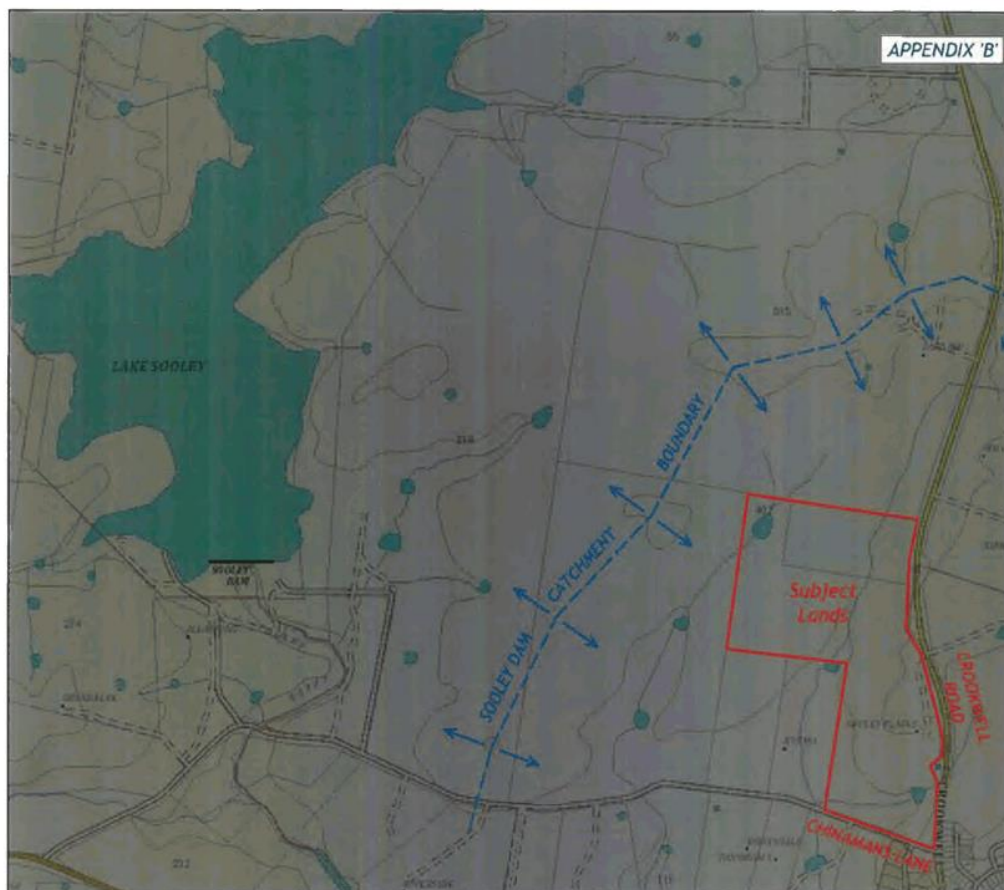


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Aerial photo showing subject lands in relation to proposed urban release areas

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Contour plan showing Sooley Dam catchment boundary in relation to subject land

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Appendix 'C' - Section 2.1.1 Criteria of identification of green field sites	
Item	Comment
Location	
The sites are within the area identified for urban expansion in the Housing Strategy adopted by Council	Yes
The site location supports a logical and contiguous development with the existing settlements of Goulburn and Marulan	Yes
The site is within the urban fringe identified by the Housing Strategy	Yes
The site can be connected to water and sewer infrastructure	Yes - these services are available along part southern and part eastern boundaries
The site has minimal or limited impact on matters of biodiversity or heritage	No known impact - a <i>Flora and Fauna</i> assessment undertaken for a previous rezoning submission on the subject lands in June 2010 identified that there was minimal impact upon flora and fauna issues The Goulburn LEP does not identify any heritage item on the site
The site will not result in the fragmentation of biodiversity corridors	The lands have been significantly modified by agricultural usage over a long period of time - there will be no fragmentation of any biodiversity corridor as a result of urban development upon the subject lands.
The site is not identified as being subject to flooding	The lands are not mapped as flood prone on Council's flood planning map attached to the LEP
The proposal will preserve and enhance riparian corridors as open space networks and utilise for active travel connections. Development around riparian corridors is to be in accordance with the guidelines for waterfront land defined by the NSW Office of Water DPE	Other than drainage depressions passing through the site, there are no riparian corridors within the site.
Avoid residential development on the southern/eastern side of the Hume Highway	The subject lands have been identified as part of the suggest urban release area
The proposal will satisfy the requirements of rural planning and subdivision principles (Rural Lands SEPP)	The subject lands have been identified as suitable for the Goulburn expansion housing strategy. Whilst the lands are currently used for agricultural purposes the extent of the proposed urban area expansion will have minimal impact upon the rural planning and subdivision principles of the SEPP
Housing	
Housing contributes the required demand identified in the Housing Strategy for the Goulburn Mulwaree LGA	The subject lands have already been identified as part of the urban release area and the inclusion of the subject lands in the ' <i>short to medium release</i> ' program will contribute positively to demand and provide choice and variety.
The proposal delivers appropriate housing to meet the demographic needs of the region.	The inclusion of the subject lands in the ' <i>short to medium release</i> ' program will provide increased opportunity and choice for housing development to meet the demographic needs of the region
Development reinforces and enhances any existing residential character	It is envisaged that the lands will be developed to be consistent with the recent urban residential development expansion located

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	easterly of the Crookwell Road.
Development will contribute towards housing affordability, choice and diversity appropriate for the anticipated demographic profile of the LGA	Appropriately selected minimum lot sizes will contribute towards these factors. It is suggested that minimum lot sizes align with those on adjoining and recent development to the east ie 700m ² .
Use	
Development will not result in land use conflicts particularly with agriculture and primary industries	Inclusion of the subject lands in the ' <i>short to medium release</i> ' proposal will contribute to an orderly and responsible pattern for urban expansion and thus minimise conflict with agriculture and primary industry
Minimise disturbance or conflict with state significant quarry areas	Not applicable

Consultants in Surveying, Planning, Mining, Mapping, Engineering and Project Management

Goulburn Mulwaree Council

Date Received: 13/11

SCANNED

Signature: eh

130 MARBLE HILL RD

KINGSDALE 2580

11-11-19

GENERAL MANAGER.

① I WOULD LIKE LAND PREVIOUSLY
PROPOSED UNDER AMENDMENT 6
(INCLUDE 130 MARBLE HILL RD) TO BE
CONSIDERED UNDER URBAN & FRINGE
HOUSING STRATEGY

② REQUESTING INVESTIGATION OF COUNCIL'S
HERITAGE MAP OF LOT 3 DP 1110297
THE HERITAGE MAP INCLUDES MY
PROPERTY AT 130 MARBLE HILL RD
KINGSDALE. PLEASE CONSIDER THIS
INVESTIGATION FOR INCLUSION IN THE
HERITAGE PLANNING PROPOSAL
YOURS FAITHFULLY
GARRIE ROBERTS

From:
Sent: Monday, 25 November 2019 9:03 PM
To: Submissions
Subject: Draft Urban and Fringe Housing Strategy

Att: The General Manager

Dear Sir,

Re: Submission re 100 Middle Arm Rd, Goulburn.
Lot A Plan 357487
Precinct 6 Middle Arm East

Thank you for the opportunity to view the Draft Urban and Fringe Housing Strategy.

However our property at 100 Middle Arm Rd has not been included in the potential Residential zones. More correctly, it appears only the South-Eastern corner of our property is included in the proposed Residential zones, causing our property to have dual zoning.

As far as we understand, we are presently just outside the present town border, and find it unusual that a forward plan for 20 years still does not encompass the property, particularly as it appears to meet the requirements for urban development.

We would submit that the entire 28.33 Hectares should be zoned Residential, for low density Housing.

The reasons for this include:

- * the property is contiguous with urban areas, with close proximity to town
- * part of our property is already in the land bank designated as Serviced Residential
- * because of its location there is viable serviceability re water and sewer
- * the size of the property (28.33 HA / approx 70 acres) provides the ability to stage development, particularly if the owners of adjacent smaller properties remain on their holdings long term as lifestyle properties.
- * the property is a flat, treeless plain, which will require minimal clearing of vegetation.
- * the property has road frontage to Middle Arm Rd

It is for these reasons we therefore urge you to please give consideration to including this property in the proposed Serviced Residential Land zoning.

We look forward to your response.

Yours Sincerely,

Bernadette & Hugh Moran

file:///S:/Scans/1%20-%20Scans/DUFHS%20Public%20Submissions/15.txt[24/01/2020 3:08:11 PM]

George W Gildea
69 Middle Arm Road
GOULBURN NSW 2580

18 December 2019

**Submission
To
Urban and Fringe Housing Strategy
As Illustrated on Consultation Report 02 October 2019**

**Reference to Property Located at
69 Middle Arm Road, Goulburn (Map Ref G5, p.32)
Owned by George W Gildea**

To the Goulburn Mulwaree Council (GMC) Councillors,

I considered the Elton Housing Master Plan of 2018 to be a very thorough independent appraisal of the needs of Goulburn to prepare for the inevitable expansion of the population of Goulburn.

It was a repeat of the 1970 NSW Statewide Planning for Regionals which cited Goulburn, Orange, Bathurst, Albury-Wodonga as the cities for expansion.

All those cities have expanded remarkably, but alas, Goulburn had 25/26,000 population in 1960 and 60 years later Goulburn has 26/28,000 population with an outstanding mix of over 60s but how many of the 18-25 group do we retain?

Elton gave us the list of technical features needed to follow and achieve 35/40,000 by 2036. But the major alteration to the plan to give heavier recognition to the 10ha residential farm blocks has allowed the Grand Plan of Elton to be fractured, opened the gates for the pressure groups.

10ha residences don't supply GMC with the lifeblood of any Council to fund improvements – revenue!! For social amenities – where are they for teenagers?

Compare the obvious at Marys Mount Road in the last 5 years. The revenue to all service providers – even down to school buses, has escalated. Young people want a young environment where children are welcome.

If GMC does not escalate its revenue, the NSW State Government may merge the GMC to another Council – it's a case of get big or get out. NSW State Government can't afford Regional Councils which are not expanding to take their share of the growing population of Australia.

Modern land developers need scale to keep house prices down for the ultimate price to the young mortgagee. Developers risk huge sums of their own funds – and they will not come to Goulburn to build 6 or 10 houses, especially in a street dominated by older residences.

The 1970 plan was desecrated by local Goulburn Council, the last in 2014, to create 10ha blocks down from 100ha limits in the RU6 zone – and I fear that the last remaining area of extensive greenfields out to Bomana Creek will again be pilfered by a few lucky people. The presence of just a few such developments will warn off a large scale developer of housing lots

- needed by GMC to survive and prosper, and not become an outpost of Moss Vale

- and not succumb to the bureaucracy of State Government.

Yours faithfully,


George W Gildea

SCANNED

George W Gildea
69 Middle Arm Road
GOULBURN NSW 2580

08 January 2020

Lord Mayor Kirk
and
Ms Kate Wooll
Goulburn Mulwaree Council
184-194 Bourke Street
GOULBURN NSW 2580

Goulburn Mulwaree Council
Date Received: 9/1/2020
Signature: 

Without Prejudice

Reference Draft Urban Housing Strategy

Dear Ms Wooll,

Attached is my reply to Mr Larsen.

Whilst I might classify my reply to him as an insult – rather the opposite, to his view, it will be:-

Mission Accomplished! That shuts him up!

And he will sleep tight and grow fat on his bonus.

– End of Mr Larsen –

But as for GMC, I would hope I have been of assistance to make you aware. As I said in my first letter to Council:

Know your enemy!

And

APA have declared GMC the enemy, because they are scared you will cause APA to be 100% legally responsible (as is the law) for the safety of the pipeline – now and forever, which is the Policy of AS 2885.

Their easement under the ground gives them no right above the ground.

If they decide their pipeline needs a heat zone – they pay for it but only if APA negotiates and compensates the affected landholders – much more profitable to relocate this pipeline.

I am not a solicitor and I don't offer legal advice to anyone, including GMC.

However I am of the opinion there is no such need in this matter.

Mr Setchfield's letter of 18th February 2019 to GMC was such a blatant insult to GMC and staff,

plus the way they have treated me for 45 years, and then their sellout to Hong Kong was the last straw! Especially when you read AS 2885 procedures for licensee to perform to achieve **the License** safety level to suit the regulator.

I resolved to find out the facts of Mr Setchfield's demands, and Larsen confirms that is the Policy of APA.

Great!

1. They have declared their opinion;
2. And demanding by stealth GMC compliance!
3. And "Blaming" GMC as the "Agent of change"

You may recall I said before to GMC that I have no regard for Mr Setchfield's authority on any matter. Having now read the edict on the Policy of the pipeline industry as expressed in AS 2885 I am adamant Mr Setchfield is quoting AS 2885 and blatantly abusing every major tenement of AS 2885.

Now my answer to 1. and 2.

1. APA is acting towards GMC

In total defiance of the Policies and creed of AS 2885 as defined and publicly declared by the Chair of the Management Committee ME038 at the APGA (Pipeline) Convention October 2015. I have attached the 15 page of easy reading of policy – it declares it is not an instruction manual how to build a pipeline.

I have stated previously AS 2885 is none of GMC's business – I repeat that! But if you don't read their policy document you'll never realise what a fool Mr Setchfield thinks you are to believe his con job.

As to Larsen, I doubt if he has ever read AS 2885 – or its Policy. He is simply a parrot repeating the message of Mr Setchfield.

2. You will be amazed as you read and I feel sure your anger will rise as page by page you will realise how insulting Mr Setchfield's letter is to a fellow professional. Both Setchfield and Larsen have sold their soul to the greedy aims of APA.
3. Don't consider the thought you cannot tell APA to "go away"! The Regulator does the telling as to whether safety is satisfied.
4. In fact, if you don't, so tell them, at the appropriate time, in a professional way strictly following the law of SEPP and AS 2885, you would be guilty of negligence in my view. I

am of the view the law does not require GMC to agree to the demands of APA. What is the reward to GMC to agree to APA demands on anything? GMC is an authority by statute.

When you read AS 2885 policy document, you must acknowledge in your mind – it is law! – by Consent of the pipeline industry.

It is not an Act of Parliament.

It is Law – the common action of a number of people with specialised knowledge of a complex dangerous subject coming together to promote a common method of communication for the participants in the emerging industry of large diameter pipelines for the long distance transport of products of continuous flow process crossing many territorial boundaries, private and industrial.

The unanimous agreement to use certain technical operational procedural methods gave it the characteristics of a Standard and it was given registration as a "Standard of Australia". That is a privilege granted to the members to honour the rules created by the founders of the pipelines industry.

It is easy to read that timeline set out by the Chair of ME038 committee in that October 2015 convention.

AS 2885 was given status because nothing of its nature of singular purpose existed before 2007. It was not born out of dispute and settlement. It was born out of a need for the singular purpose of allowing a multitude of disconnected people to be represented by an agreed statement of words to be followed by all entities who wished to be representative of that purpose.

AS 2885 has never had an adversarial attitude.

On 3rd September 2019 I wrote to GMC that I do not accept Mr Setchfield's demands on GMC as authoritative in any way.

I invited Larsen and Setchfield with attachments to read AS 2885. They did not do so and made a fool of themselves, with lack of detailed knowledge. Someone in APA is pulling the strings and telling Larsen and Setchfield how to think and what to say.

Note in my letters I have repeatedly used "2007" was the point "household gas" became "explosive goods" (now Larsen replies ... and asks why I keep quoting 2007! – the gas per se has never changed).

Larsen doesn't realise Aquarius has arrived! Hey Mr Larsen, the law put a new label (2007) on the old gas and made a new set of laws to match the new label.

How can anyone read AS 2885 literature and not know 2007 was the dawning of safety in the industry! And now I attach July 2017 articles from "The Australian Pipeliner" highlighting safety updates because of a rupture in South Australia and –

GMC take note!

AS 2885 is now embedded in WHS – which has coverage to reach back to safety beyond workers.

Simply modern thinking. Larsen and Setchfield are in the dark ages.

And note, the publication explains it is cheaper to replace the pipeline instead of the expense to the Licensee of updating safety requirements. Nowhere in this AS 2885 literature have I read anyone other than the Licensee is obliged to protect the assets of APA as Setchfield and Larsen keep shouting.

GMC is not in the pipeline industry and should not have to read AS 2885.

But in these circumstances you must do so! So you can rubbish the approach of APA to GMC and enhance your position as the Consent Authority in SEPP. It is so easy to read and written on the first page you will realise how Mr Larsen and Setchfield are fools or deliberate liars. With Bleasel and McDonald gone out of APA it is beyond me why APA new Board has not taken the opportunity to change the ethics of APA to that of a Corporate citizen with social responsibilities in the 2020 era.

AS 2885 is not an adversarial document. It is guidelines to advise as common purpose in an industry that lacks cohesion – as does any emerging technology.

But APA new MD Fraser, when the Press challenged him on their failure to sell out to Hong Kong – boasted in defiance! “We’ll carry on, like we have done the last 20 years!”

Big mouth, big problem – he is well aware his lifeline, natural gas, has to find a survival course in the next 20 years of changing technology (quite unlike the last 20 years).

That is my summation of my enemy, APA!

- And I have no intention of retreating. I am a gas user and a landholder – I am a participant in the pipeline industry!
- More so than GMC
- GMC stands aloof of AS 2885 as the Consent Authority of SEPP.

As to the present Submissions (re: the Pipeline)

I consider GMC has fulfilled all its obligations following strategy publication. I surmise GMC (as far as APA is concerned) does nothing until, as SEPP states, it has an application before it from some landholder close to the pipeline.

I call to your notice the essence of Mr Phillip McCutcheon letter 18/12/2019 to GMC. He is repeatedly trying to glorify that GMC has acknowledged constraints of pipeline – he chooses to ignore 19 other pages of other Constraints published by GMC. He is implanting in his own mind that GMC has agreed to all APA’s proposals and he is telling you so by trying to say you can’t back out from his proposal – that is APA tactics – bully the reader.

Comment

After 70 years as a Tax Advisor, I marvel at the dexterity of the thinking of taxpayers determined to not pay tax, and use various words to persuade the Commissioner. But the way a local tax judge called one such novel approach was when he summed up and said:-


"If it quacks like a duck and walks like a duck, don't try to tell me it is a rooster! Appeal dismissed!"

Summing up

It will take time to plan my next assault on APA. I hope I have not been a nuisance to GMC. If a point arises in the future I am always in for a good debate for a good cause/clause.

Thank you.

Yours faithfully,

 **George W Gildea**
Ratepayer

List of Attachments

1. Letter to Mr Larsen, APA 8th January 2020

2. The Story of the Standard
Timeline of AS 2885 15 Pages

3. GWG Extracts of the AS 2885 Standard

To Illustrate:

The Correspondence of APA, Larsen and Setchfield is so wrong – to be INTENTIONALLY FALSE

You must read just the first page to realise Larsen and Setchfield are fools or liars

Page 1, Paragraph 4

AS 2885 Exists for:

Safety of General Public
Protection of Environment
Security of Supply

APA as Licensee is 100% responsible for performance – no matter what changes occur

4. Investigations of Land Use
Certainly NOT the demands of Mr Setchfield 9 Pages

5. 2017 Attachments on Safety AS 2885
The Australian Pipeliner, July 2017

- a. Page 26, **Letter to the Editor**, Leigh Fletcher, Re: "Reasonably Practicable"
"The risk must be *Low* or *Negligible*."
- b. Pages 26-30, **Author's Response**, Jan Hayes
"It also needs to be acknowledged that we're all trying to ensure that the public and workers are safe from pipeline accidents."
- c. Pages 32-34, **New standard for pipeline safety management**, Peter Tuft
Note well the "Black Swan" analogy – I prefer to be more direct!! "There is none so deaf as those who do not want to hear"

George W Gildea
69 Middle Arm Road
GOULBURN NSW 2580

08 January 2020

APA Group
121 Wharf Street
Spring Hill QLD 4000

COPY

Without Prejudice

**For the Attention of Mr Ross Larsen
Manager, Infrastructure Protection**

Re: GMC Strategy Plan

Dear Mr Larsen,

I acknowledge your letter of 18th December 2019, which no doubt you arranged to arrive too late for me to include any comment in Submissions which you knew were to close 18th December 2019.

The essence of your letter is that you endorsed Mr Setchfield's demands of 18th February 2019 to GMC on APA's policy on their arrogant and intransigent attitudes to never disclose to anyone including GMC on how you discharge your responsibilities as a public company to the people of Australia.

The whole tenor of my letter was seeking knowledge of your safety maintenance program for which APA is 100% responsible. I gave you a 16 page questionnaire on seeking public knowledge of how you protect the people of Goulburn. I specifically asked – had APA ever done for their shareholders a risk analysis?

You did not answer that singular point! Either you don't know what it means or you know there has never been one done.

The reality is like the "Don't Dig" signs on my road fence – never painted or replaced in 45 years. Never once in 45 years to visit to inspect pasture damage visible from space satellite. Attached is a photo, so you won't forget me!

You are engrossed in the unauthorised arrogance of APA and have lost your perspective on the commercial world.

It has been a waste of time talking to you.

Yours faithfully,

George W Gildea

TUESDAY OCTOBER 22, 2019

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ACT NOW: George Gildea says the high pressure gasline running behind him on his Middle Arm Road property is 47 years old and a public safety risk. Photo: Louise Throver.

Blowing up over gas pipe

George Gildea fears he's sitting on a time bomb.

The high pressure gas line dissecting his 154-hectare Middle Arm Road property is 47 years old, well beyond what he says is its stated 25-year life.

Continued page 3

OUTLAW 50	ACE 150	RZR 170
<ul style="list-style-type: none"> • 4 Stroke Engine - 49cc • Electric Start • Speed Limiter • Safety Flag • Polaris Variable Transmission • Daytime LED Running Lights • Height Adjustable Floor Boards • Approved Youth Helmet • Suitable for Ages 10 and Over 	<ul style="list-style-type: none"> • 4 Stroke Engine - 148cc • Electric Start • Speed Limiter • Safety Flag • Reverse Gear • Polaris Variable Transmission • Electronic Fuel Injection • Daytime LED Running Lights • Disc Brakes Front & Rear • Height Adjustable Floor Boards • Approved Youth Helmet • Suitable for Ages 10 and Over 	<ul style="list-style-type: none"> • 4 Stroke Engine - 189cc • Electric Start • Speed Limiter • Safety Flag • Reverse Gear • Polaris Variable Transmission • Electronic Fuel Injection • Daytime LED Running Lights • Disc Brakes Front & Rear • Height Adjustable Floor Boards • Tilt Approved Youth Helmet • Suitable for Ages 10 and Over
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APA Ref: MWP_KP1182.68

19 December 2019

Mr George Gildea
69 Middle Arm Road
Goulburn NSW 2580

EMAIL OUT: dageogil@tpg.com.au

Dear George,

RE: Addressing issues raised regarding APA pipeline

It was good to be able to meet you in person at Council offices on 29 October 2019, and your appreciation of this visit was most welcome. APA seeks to work closely with landholders and maintain a good relationship. We regret any instances which may have undermined good relationships. We are committed to open communication, minimising landholder impact, addressing concerns, and providing responsive service. Furthermore, APA is committed to the safe operation of its pipelines and spends significant resources to ensure that it meets, and in some cases exceeds, all safety requirements.

I am pleased to be able to respond to your letter dated 25 November 2019, which was sent by you following the discussions with Kate Wooll, Mayor Bob Kirk, and yourself on 29 October 2019. As discussed at the meeting I have provided further information to Council regarding pipeline maintenance and regulatory requirements. A copy of this letter to Council is attached and it addresses a number of the queries raised in your letter. Also attached is a copy of our further planning advice to Council regarding the revised Draft Urban and Fringe Housing Strategy.

This letter addressed to you, focuses on other issues raised in your letter, but not directly relevant to Council matters (as discussed at our previous meeting). Rather than answer each of your questions individually, this letter (in conjunction with attachments) attempts to provide the information that you seek, and in doing so address all of your queries.

1. Change in pipeline characteristics

Your correspondence refers to 2007 as being a point of change in operation and/or potential impact from the pipeline. We are not aware of what has informed your opinion in relation to this, but the pipelines in question have the same characteristics now, as when they were constructed and commissioned. APA purchased the pipelines from other companies after they were built and had been in operation for some time. There has been no change in the types of gas in our pipelines over the life of the pipelines and no other material changes (e.g. type of pipe or pressure) which has changed the measurement length.

Because APA was not involved in the construction of the pipelines we cannot comment on any communications, or lack thereof, to landholders at the time of construction regarding measurement length (ML). The ML has been raised by APA now because the purpose to which it relates (land use change) is now relevant.

2. Retrospective application of AS2885

There have not been any significant changes to AS2885 requirements which would trigger the need for any changes in design or how the pipeline needs to be operated (in relation to the retrospective application of AS2885). In the current version of AS2885, it is only a change in land use surrounding the pipeline, which must be assessed, as required, by a land use change Safety Management Study (SMS).

APA Group comprises two registered investment schemes, Australian Pipeline Trust (ARSN 091 678 776) and APT Investment Trusts (ARSN 215 525 341), the securities in which are stapled together. Australian Pipeline Limited (ACN 091 344 704) is the responsible entity of those trusts. The registered office is HSBC Building, Level 19, 580 George Street, Sydney NSW 2000.

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3. Additional pipelines

The pipeline easement of 24.385m width currently contains two pipelines. APA has no foreseeable plans to construct any additional pipelines within the easement.

4. APA company obligations

APA is an Australian Stock Exchange (ASX) publically listed company and is not a public utility. APA provides full disclosure of its operations and maintenance as required, to regulatory agencies. APA also publishes results and forecasts as required of a publically listed company. APA's annual reports contain the required financial information (also audited as required). However, as a commercial operation APA must retain other commercial information in confidence.

APA places the utmost importance on meeting regulatory and community expectations for safe operations of our assets. Any loss of containment or safety incident would impact on APA's operations and reputation, and have considerable cost implications. It is critical to APA to ensure all of our pipelines are operated to the highest standards, and protected from any third party damage. Failure to comply with regulatory requirements can also lead to severe penalties and in severe circumstances a revocation of a Pipeline Licence.

There are various persons responsible, at various levels of APA, for various pipelines within Australia.

5. Heavy vehicle crossings

APA has no issue with the easement being crossed by agricultural vehicles as part of standard agricultural operations. The use of road legal vehicles and agricultural vehicles is not an issue, but APA seeks to ensure that where there are new repeated frequent crossings at one point, or crossing by other non road legal vehicles, that the potential impact of the pipeline is examined and additional protective measures put in place if necessary. Where the pipeline is constructed crossing a road, it is typically installed at a greater depth or covered in protective concrete slabbing. We do not seek to limit:

- standard agricultural operations
- crossings associated with landholders use of the land
- maintenance of other infrastructure.

There is always a balance in our messaging between providing sufficient information, and making the message succinct. We appreciate the feedback in this instance, and will take this into account in our future messaging.

6. Signs and maintenance

APA is aware of previous complaints by yourself against APA, and out of respect, we have not wanted to enter your property unless absolutely necessary. If you wish us to do so, we would be pleased to update signage on your property in consultation with yourself regarding access, timing, and placement.

The maintenance activity on neighbouring properties does not have any relation to the current discussions around the Draft Urban and Fringe Housing Strategy. Maintenance occurs from time to time over various areas depending on scheduling and need.

7. Relocation of pipeline

As provided in our letter to Council (from myself) dated 18 December 2019, the maintenance and operation of the pipelines ensure their ongoing safe operation. As in other cases of urban expansion the pipelines can co-exist safely with urban development. The cost of relocation would far exceed any additional safety measures required with the change in land use. In addition, relocation of the pipeline would involve landholder and environmental impacts which are not warranted.

We respectfully disagree with relocation of the pipeline, as this action is neither necessary nor beneficial.

8. End of life

When a pipeline ceases operation there are two practical options. One is to retain the pipeline in-situ. In this case the pipeline is normally filled with a slurry to prevent future subsidence as the pipeline corrodes. This allows for continuing and ongoing use of the land. The other option is to remove the pipeline, which would involve land disturbance and rehabilitation. If APA (as the easement owner) should wish to surrender the easement to the landholder, the option for treatment of the pipeline would need to be agreed with the landholder and approved by the Pipeline Licence regulator. This would include any agreed remediation should the pipeline be removed.

9. CKI takeover bid

In the middle of 2018 it was announced that CKI was initiating action to takeover APA, as any company may seek to do to another. This was reported throughout the media from the outset with full disclosure from APA. This bid was always subject to appropriate Federal Government scrutiny and processes, and the Federal Investment Review Board made the decision to disallow the takeover.

Please contact Ross Larsen on 0459 899 076 or email ross.larsen@apa.com.au should you wish to further discuss the contents of this correspondence.

Yours faithfully,



Ross Larsen
Manager Infrastructure Protection
Infrastructure Planning and Protection

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APA Group | apa.com.au



APA Ref: MWP_KP1182.68

18 December 2019

Kate Wooll
Business Manager Strategic Planner
Goulburn Mulwaree Council
Locked Bag 22
Goulburn NSW 2580

EMAIL OUT: kate.wooll@goulburn.nsw.gov.au

Dear Kate,

RE: Addressing issues raised regarding APA pipeline maintenance regime

This letter is provided to Council following a meeting with Kate Wooll, Mayor Bob Kirk, and George Gildea on 29 October 2019. Attending on behalf of APA were Ross Larsen (Manager Infrastructure Protection) and Michael Brown (Senior Integrity Engineer). While APA has made representations in relation to planning matters (via Ben Setchfield, Senior Urban Planner), the purpose of the previous meeting and this letter is to address broader issues associated with existing integrity and maintenance of the pipeline. However, this letter does expand on issues associated with the measurement length (ML) and Safety Management Study (SMS) to address issues raised during the meeting. This letter should be read in conjunction with APA's planning submission on the Draft Urban Fringe Housing Strategy (letters dated 19 February 2019 and 18 December 2019).

1. Background

The Moomba to Sydney Pipeline was constructed from 1974 to 1976 to provide natural gas (i.e. household gas) from Moomba in northeast South Australia to the NSW gas market. APA has only been in existence since 2000, and obtained ownership of the pipeline at this time. APA refers to this pipeline as the Moomba to Wilton Pipeline (MWP) as Wilton is the end of the APA owned pipeline. There has been no change to the type of gas transported in the MWP over time. There has also been no change in the measurement length (ML) of the MWP over time.

In the mid-1990s (commissioned in 1996) a second pipeline was constructed in the same easement (24m wide) to transport ethane (a gas used for industrial purposes). This pipeline was purchased by APA in 2016, and is referred to by APA as the Moomba to Sydney Ethane Pipeline (MSEP). There has been no change to the type of gas transported in the MSP over time. There has also been no change in the ML of the MSP over time.

There has been no change in the types of gas in our pipelines over the life of the pipelines and no other material changes (e.g. type of pipe or pressure) which has changed the ML. The products (gas and ethane) transported in the pipelines have always had the same potential impact should there be a loss of containment, and that is why APA spends significant money on maintenance, operation, and prevention of external interference.

2. Council

We acknowledge that Council has the responsibility to provide suitably zoned and serviced land for urban expansion and this is something that can occur near APA's pipelines, and which we do not seek to prevent. However, APA's assets must be taken into account, just like other factors such as flooding hazards, or traffic impacts/road upgrades. These all require appropriate studies (usually by expert consultants) and may involve upgrades or mitigation measures.

APA Group comprises two registered investment schemes, Australian Pipeline Trust (ARSN 091 678 778) and APT Investment Trust (ARSN 115 585 441), the securities in which are stapled together. Australian Pipeline Limited (ACN 091 344 704) is the responsible entity of those trusts. The registered office is HSEC Building, Level 19, 530 George Street, Sydney NSW 2000.

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AS2885 has a very direct implication in relation to land use planning and development, due to the need to consider the implications of land use change. While AS2885 is not cited in the SEPP, it is the key consideration for the pipeline operator in providing their response, and a key factor in considering "potential safety risks or risks to the integrity of the pipeline that are associated with the development to which the application relates". While we do not expect Council to be experts for the purposes of AS2885 Council does need to consider the relevant principles and be satisfied that the requirements of AS2885 have been met.

3. Pipeline management and maintenance

APA places the utmost importance on meeting regulatory and community expectations for safe operations of our assets. In addition, any loss of containment or safety incident would affect APA's operations and reputation, and have considerable cost implications. Therefore, it is critical to APA to ensure all of our pipelines are operated to the highest standards, maintained to prevent any type of failure, and protected from any third party damage.

APA operates the pipeline according to the leading practice industry requirements of AS2885. These requirements are reflected in APA procedures, and included in a Pipeline Management System (PMS), which is a requirement of AS2885, and of our regulator (Department of Planning, Industry and Environment). The PMS is reviewed and updated as required every 2 years. Compliance with the PMS is independently audited annually, and the audit report is provided to the regulator. The audit examines all controls including maintenance, patrols, landholder liaison, and third party awareness.

The following controls are in place to ensure necessary management and maintenance in accordance with AS2885:

- The pipeline is subject to in-line Inspection (ILI) at a maximum interval of 10 years, which detects any degradation of the pipeline. Depending on the level of degradation, the pipeline may be excavated to verify the pipeline condition and make repairs.
- A periodic operational review SMS is held every 5 years.
- A remaining life review (RLR) is undertaken at a maximum interval of 10 years to determine if the pipeline is fit for purpose to operate until the next RLR. This review requires demonstration of the integrity and safety of the pipeline.
- Corrosion protection system effectiveness is audited on an annual basis.

Pipeline management and maintenance will continue as required under state legislation and AS2885, with the incorporation of any changes that may be found necessary as a result of a land use change SMS.

4. Safety Management Study

APA is happy to discuss with Council, responsibility for cost of the Safety Management Study to achieve a mutually acceptable, independent, and transparent outcome. Regardless of cost apportionment, the SMS must be produced by an independent expert consultant and involve input from all relevant parties, in order to be relevant and impartial.

It is always the case, regardless of cost apportionment, that APA insists an independent expert consultant complete a land use change SMS and writes the report. The SMS should include the expert consultant, APA (as the holder of technical knowledge about the pipeline and our current safety measures), and the agent of change (in this case Council). It is also certainly the right of Council, if it wishes, to commission a SMS report. However, whether initiated by APA or Council, such a report would still need to rely on the input of APA (technical knowledge). The SMS process typically involves a workshop (usually around a day long) involving all relevant parties to work through the risks and appropriate controls.

It is a principle of the SMS that it merely identifies addition controls that may be required. It does not seek to apportion costs associated with such controls.

There are SMSs conducted for a range of purposes including:

- Prior to construction to establish the required controls and design parameters
- periodic operational review (5 yearly)
- Encroachment SMS for activity within the pipeline corridor/easement
- Land use change SMS triggered by specific development proposals.

In this instance, the SMS required is triggered only by land use change as a result of the Draft Urban and Fringe Housing Strategy, and is focused on examining risks associated with that land use change. It is not triggered by any change in the pipelines or the age of the pipeline.

5. Measurement length

APA seeks to work with local government and developers to achieve the best outcomes from a pipeline integrity perspective and community safety, while also seeking to accommodate urban growth and necessary community outcomes. We have been successful in doing so in many situations, and likewise seek a collaborative approach in this instance.

The ML is not an area over which APA has any legal control or any form of tenure, nor do we wish to exercise any such rights. The ML is not an area in which development or activity is precluded. The ML does not prevent use for standard agricultural activities. It does not prevent urban or rural residential development occurring. In fact, there are many instances around Australia, including through major metropolitan areas where development, including residential housing, exists up to the edge of the pipeline easement, with no issue to APA or to the surrounding residential development. In addition, the easement itself provides the opportunity for valuable linear open space, which is an asset to the surrounding community.

APA does not seek to impose any outcome on Council (or private development) outside of our pipeline easement, but we are obligated to ensure that Council and developers are aware of the pipeline, associated issues, and work to achieve the best outcomes.

The ML is defined as the radius of the 4.7kW/m² radiation contour for an ignited rupture. A rupture is defined as a failure of the pipe such that the cylinder is opened to a size at least equivalent to its diameter. In accordance with AS2885, the ML is calculated as detailed below (where D is the ML).

$$D = \sqrt{\frac{\tau F Q}{4\pi K}}$$

where

D = minimum distance from the midpoint of the flame to the object being considered, (m)

τ = fraction of heat intensity transmitted (1.0)

F = fraction of heat radiated (assumed 0.25)

Q = heat release (lower heating value, in kW)

K = allowable radiation, (in kW/m²)

Having two pipelines in the one easement does not, of itself, increase the ML. Rather the greater of the two MLs becomes the one that applies to that corridor. The whole of the easement from Moomba to Sydney contains two pipelines. ML of pipelines around the country vary, depending on pipeline operating pressure and diameter.

Please contact Ross Larsen on 07 3223 3382 or email ross.larsen@apa.com.au should you wish to further discuss the contents of this correspondence.

Yours faithfully,

A handwritten signature in black ink, appearing to be 'RL' followed by a horizontal line.

Ross Larsen
Manager Infrastructure Protection
Infrastructure Planning and Protection

cc: George Gildea
dageogil@tpg.com.au

The Story of the Standard

Susan Jaques

Chair of ME-038 Committee

Prepared for presentation at APGA Annual Convention, October 2015

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1. Introduction

In late 2014, I was appointed as the new Chair of ME-038, the committee overseeing the suite of Standards that apply to Australian high-pressure transport pipelines. Prior to this, the Chair was ably held for many years by industry stalwart Phil Venton.

This paper presents an overview of Australian Standards in general, a review of the AS 2885 suite of Standards in particular, and how it fits into the Standards Australia structure, as well as briefly describing the work of the committees responsible for the Australian pipeline standards.

Much of the information below in Sections 2, 3, 6 and 7 of this paper is derived from information available on the Standards Australia website: www.standards.org.au. Section 4 and 5 rely heavily on the text from the referenced items (Section 9). This introduction paraphrases parts of the Standard itself.

The AS 2885 Standard exists for the safety of the general public, the protection of the environment, and for security of supply. It has been created by industry professionals, technical experts, and researchers, for the purpose of providing an authoritative source of fundamental principles and practical guidelines, to be used by responsible and competent persons and organisations.

Most pipelines to which this Standard applies will be designed, constructed, tested, and operated under some form of license or regulation, and the Standard does not supersede or take precedence over the requirements of any Statute or Regulation. The Licensee, a defined entity that the regulatory authority holds accountable for the pipeline, is responsible for the safety of the pipeline. This includes responsibility for the engineering design, construction, and maintenance of pipeline integrity during operation.

The Australian pipeline industry is proud of this Standard and where it has come from, because it is ours, it applies to our circumstances and industry, and it should to be used and applied appropriately. The AS 2885 Standard is not an instruction manual for untrained persons. It is not a detailed design specification; appropriate experience and competent engineering judgement are the foundations of the Standard.

Pipelines designed to AS 2885 are required to have sufficient strength to withstand all forces to which it will be subjected during construction, testing, and operation. All threats to the pipeline will be identified and either controlled, or the associated risks will be evaluated and managed to an acceptable level, and the design is reviewed and approved.

Once a pipeline is in service, the integrity and safe operation is maintained in accordance with an approved pipeline management system. If changes occur in relation to the pipeline, appropriate steps are to be taken to assess and resolve those changes in order to maintain safe operation of the pipeline. At the end of its system design life, the pipeline is to be abandoned unless an approved engineering investigation determines that its continued operation is safe.

All of these fundamental principles within AS 2885 mean that we rely up the skills and experience of pipeline engineers and technicians to implement these principles in the design, construction, and operation of pipelines.

2. What are Standards?

After rapid industrialisation in the early nineteenth century, the general absence of national standardisation caused huge inefficiencies. Absence of national standardisation is still apparent today in different railway gauges between states, and on an international scale, the different electrical plug-in designs.

Occupational injury also became a major issue during industrial advancement, which was one of the driving forces behind the establishment of Standards, particularly due to the high number of fatalities in the late 1880s caused by explosions in pressure systems.

Standards are a uniform set of criteria presented as published specifications that establish a common language – and expectation – to produce, in this case, pipelines that are safe, reliable, and consistently perform in the way they are intended to.

An important part of Standards development is the reliance on consensus from a committee of technical experts. Committee members are chosen to bring a broad range of viewpoints to the committee deliberations. According to the Standards website, in Australia, there are around 9,000 technical committee members.

For the AS 2885 suite of Standards, which is overseen by the ME-038 Technical Committee, there are over 100 industry personnel involved in the subcommittees supporting our standards. These subcommittees include representation from each of the state regulatory authorities.

3. Standards Australia, AS 2885, and ME-038

3.1. Sectors

Standards Australia and the development of Standards is organised by “Sector”. Below are the twelve Sectors identified by Standards Australia, and the number of Technical Committees within each Sector. ME-038 is part of the “Electrotechnology and Energy” Sector.

Australian Standards - SECTORS	# of Technical Committees
Agriculture, Forestry, Fishing and Food	26
Mining	12
Manufacturing and Processing	174
Building and Construction	134
Electrotechnology and Energy	87 (includes ME-038)
Water and Waste Services	40
Transport and Logistics	38

Australian Standards - SECTORS	# of Technical Committees
Health and Community Services	47
Consumer Products, Services and Safety	69
Education and Training Services	3
Communications, Information Technology and e-Commerce Services	38
Public Safety; Public Administration; Business and Management	89

3.2. The Electrotechnology and Energy Sector

Within the *Electrotechnology and Energy* Sector, there are 87 Technical Committees, of which 57 are active committees. Below is the list of the 57 currently active Electrotechnology and Energy Technical Committees:

Electrotechnology and Energy Sector – Active Committees
AG-001 Gas Appliances
AG-006 Gas Installation Committee
AG-008 Gas Distribution
AG-009 Natural Gas Vehicle Refuelling Stations
AG-011 Industrial and Commercial Gas-Fired Appliances
AG-012 Gas Appliances - Quality of Servicing
AG-013 Components used for Gas Appliances and Equipment
EE-001 Residential Air-conditioning
EE-003 Mirror to ISO Technical Committee 285
EL-001 Wiring Rules
EL-002 Safety of Household and Similar Electrical Appliances and Small Power devices
EL-003 Electric Wires And Cables
EL-004 Electrical Accessories
EL-006 Industrial Switchgear And Controlgear
EL-007 Power Switchgear
EL-008 Power Transformers
EL-009 Rotating Electrical Machinery
EL-010 Overhead Lines
EL-011 Electricity Metering Equipment
EL-013 Measurement And Protection Transformers
EL-014 Equipment for Explosive Atmospheres
EL-015 Quality and Performance of Household Electrical Appliances
EL-020 Electric Water Heating Appliances
EL-022 Primary Cells And Batteries
EL-024 Protection Against Lightning
EL-027 Power Electronics
EL-034 Power Quality
EL-036 In-service Testing of Electrical Equipment
EL-041 Lamps and Related Equipment
EL-042 Renewable Energy Power Supply Systems & Equipment

Electrotechnology and Energy Sector – Active Committees
EL-043 High Voltage Installations
EL-044 Safe Working on Low-Voltage Electrical Installations
EL-049 Safety of Electrical Equipment for Measurement and Laboratory Use
EL-050 Power System Control and Communication
EL-052 Electrical Energy Networks, Construction and Operation
EL-053 Fire Hazard Testing - Electrical Equipment
EL-054 Remote Demand Management of Electrical Products
EL-056 Room Air Conditioners
EL-057 Boating and Boating Marinas Installations
EL-058 Energy Efficiency for Swimming Pool pumps
EL-059 Dishwashers, Clothes Washers and Dryers
EL-060 Household Refrigerating Appliances
EL-061 Electrical Energy Storage
EL-062 Smart Grids
EL-063 Environmental standardization for electrical and electronic products and systems
EN-001 Energy Auditing
ET-006 Australian IEC Conformity Assessment Committee
EV-020 Sustainability Criteria for Bioenergy
LG-002 Lighting for Roads and Public Spaces
ME-038 Petroleum Pipelines (Chair = Susan Jaques)
ME-070 Liquefied Natural Gas Storage and Handling
MS-011 Classification Of Hazardous Areas
MS-066 Hazardous Areas Competencies
MS-067 Ex Mark Committee
NU-001 Dummy to IEC SC 45B
QR-012 Conformance Marking to Regulatory Requirements
TE-021 Energy performance for Audio/Video, ICT and Associated Equipment

3.3. Technical Committees and Subcommittees

Each Technical Committee in the above list has a Chair, chosen from within the industry it represents and appointed by Standards Australia, and a Project Manager, appointed by Standards Australia. The Project Manager works with the Committee Chair to assist the Committee to meet the agreed outcomes of their projects. This means the Project Manager arranges meetings, takes minutes at those meetings, and provides input and information into the process. In particular, they coordinate the public commenting process and help to achieve resolution of the comments through the consensus approach.

Technical Committee members do not represent their employers. Each Technical Committee constitution is made up of Nominating Organisations, who are interested parties such as associations, government departments, and in some cases, academia.

Technical Committee members are appointed as representatives of the Nominating Organisations, and represent the views of that Nominating Organisation's interest group. The names of the Nominating Organisations represented in the development of Australian Standards are listed on the inside cover of all Australian Standards, however

names of the individuals representing those Nominating Organisation is not made public by Standards Australia.

It should be highlighted, as we are very proud of this detail, that each State Regulator (and New Zealand) nominates a representative on ME-038 to protect their public interest in pipeline safety. The regulators are active and valuable contributors to the committee work.

3.4. Nominating Organisations

The constitution, or membership, of the ME-038 Petroleum Pipelines Technical Committee is made up of representatives from the following Nominating Organisations.

Nominating Organisations to ME-038
APGA Research and Standards Committee
Australasian Corrosion Association
Australian Industry Group
Australian Institute of Petroleum Ltd
Australian Petroleum Production and Exploration Association (APPEA)
Australian Pipelines and Gas Association Limited (APGA)
Department for Manufacturing, Innovation, Trade, Resources and Energy (SA)
Department of Mines and Energy (NT)
Department of Mines and Petroleum (WA)
Department of Natural Resources and Mines (QLD)
Department of Trade and Investment, Regional Infrastructure and Services (NSW)
Energy Networks Association
Energy Safe Victoria
Gas Association of New Zealand
Independent Chairperson
New Zealand Institute of Gas Engineers
Standards New Zealand (ex-officio)
Welding Technology Institute of Australia
Worksafe New Zealand

3.5. ME-038 Subcommittees and Publications

The ME-038 Technical Committee for Petroleum Pipelines has six subcommittees, each with its own Chair, and when active, about 30 committee members. Subcommittee members are chosen for their technical expertise in the specific area:

ME-038 Subcommittees	Chair	Status
ME-038-01 Design and Construction	Peter Tuft	Active
ME-038-02 Welding	Paul Grace	Active
ME-038-03 Operation and Maintenance	Ed Gaykema	Hold
ME-038-04 Submarine Pipelines	Andrew Pearce	Active
ME-038-05 Field Pressure Testing	Phil Venton	Hold

ME-038 Subcommittees	Chair	Status
ME-038-06 Distribution pipelines	-	disbanded
ME-038-07 nil	-	non-existent
ME-038-08 Linings for oil and gas	David Anderson	Active

The ME-038 Technical Committee and its subcommittees are responsible for several published Standards, including the AS 2885 Suite:

AS 2885 Suite: Pipelines—Gas and liquid petroleum	Current Version and Status
AS 2885.0 (General Requirements)	2012 (Amendment 2 published 1-Sep-2015)
AS 2885.1 (Design and Construction)	2012 (under revision)
AS 2885.2 (Welding)	2007 (under revision)
AS 2885.3 (Operation and Maintenance)	2012
AS 2885.4 (Submarine pipeline systems)	2010 (commencing revision process)
AS NZS 2885.5 (Field Pressure Testing).	2012
AS 2885.6 (Safety Management Study)	New Part –expected late 2016/early 2017

For the above listed standards, the numerically associated subcommittee is responsible for the Part (ie, Part 2 managed by ME-038-2). AS 2885.0 is currently under the remit of the Part 1 committee; however given that Part 0 is an over-arching General Requirements standard, this will be moved into the remit of the ME-038 “Main” Technical Committee during the annual meeting in February 2016. The new Part 6 (Safety Management Studies) will be developed by subcommittee ME-038-01.

Through subcommittee ME-038-08, ME-038 is also responsible for the coating standards below.

Coatings / Corrosion Control Standards	Current Version
AS 4822 External field joint coatings for steel pipelines	2008
AS NZS 1518 External extruded high-density polyethylene coating systems for pipes	2002
AS NZS 3862 External fusion-bonded epoxy coating for steel pipes.	2002

In the past few years there have been two official rulings from Australian Standards as to the interpretation of the Standard:

Ruling	Topic
RUL PP.1-2012	Application of Welding Standard
SA RUL PP.2-2013	Application of Pressure Piping

3.6. ME-038 Current Active Projects

There are currently six active projects under ME-038:

Active ME-038 Projects: Standard under Revision	Expected Completion Date
AS/NZS 2885.2 Welding	Late 2015 or early 2016
AS/NZS 2885.4 Offshore submarine pipeline system	August 2016
AS/NZS 2885.1 Design and construction	Late 2016 or early 2017
AS/NZS 2885.6 Late 2016 or early 2017	Late 2016 or early 2017 – New Part for Safety Management Study
AS/NZS 3862 External fusion-bonded epoxy coating for steel pipes	TBA – adoption of ISO 21809-2

4. Timeline of AS 2885

A simplified history of the AS 2885 / ME-038 suite of standards is provided below. Not every publication revision is listed.

Year	Activity
1969	Industry relied primarily upon the United States for its design, construction and operational standards for petroleum pipelines in the form of ASME B31.4 and B31.8.
1972	Australian Standard "CB 28" first published Between 1969 and 1972, Australian pipeline engineers developed an Australian Standard (CB28 – 1972) – for gas pipelines, which was, to all intents and purposes, a copy of the relevant US standards, and did not reflect Australian conditions.
1975	AS 1697 (1975) first published from CB28. Still essentially a copy of US Gas Pipeline Code B31.8, a prescriptive Standard, mandating "design" factors for pipeline thickness (this practise is still current in North America).
1976	AS 1958 (Submarine Pipelines) published.
1977	AS 2018 (Liquids) and AS 1978 (Field Pressure Testing) published.
1979- 1981	AS 1697 revisions While this new standard better reflected Australian conditions, it still bore a

Year	Activity
	strong resemblance to the US standard.
1981	AS 1958 (Submarine Pipelines), AS 2018 (Liquids) revisions
1985-87	AS 1958 + AS 2018 + AS 1697 combined and published as AS 2885. In the late 1980s, there was a clear intention by a small number of pipeline engineers to develop the Australian pipeline standards according to the "laws of nature" rather than the earlier paradigm of "laws of man". That is, to apply the outcomes of research and intelligent application of science and mathematics to setting standards, rather than relying upon empiricism and rules of thumb. This new approach was first implemented through AS 2885 - 1987. Concept of "approval" and "responsibility" introduced. Subsequently AS 2885 was separated into Parts through the early '90s.
1994	COAG Hobart 25 February 1994 - Free and fair trade in gas The COAG (Council of Australian Governments) agreed to adopt AS 2885 to achieve uniform national pipeline construction standards. Australian States/Territories references AS 2885 as the technical standard for pipeline design, construction and operation.
1995	AS 2885.2 (Welding) was created to "supersede and radically revise AS 2885-1987 Section 7 Welding" (as noted in the Preface to the 2002 edition).
1997	Among other updates and changes, AS 2885.1 - 1997 removed the external interference protection "design factors", and now requires the designer to consciously design for safety, via the Safety Management Study (SMS) process.
2002	Published: AS/NZS 1518 External extruded high-density polyethylene coating systems for pipes AS/NZS 3862 External fusion-bonded epoxy coating for steel pipes. Revised: AS 2885.2 Welding
2003	AS 2885.4 (Submarine Pipeline Systems) published.
2007	Revised: AS 2885.2 Welding Revised: AS 2885.1 Design and Construction. This revision had a gestation of nearly ten years. It was catalysed by a desire in some parts of the industry to allow MAOP upgrade on existing lines, and hence the entire Standard was reviewed with that change in mind. A lot of issue papers were written around this edition. Section 9 MAOP Upgrade was introduced and the SMS

Year	Activity
	requirements were substantially revised and improved. This is clear evidence of the industry's response to industry-initiated change. The change is considered and studied, and, as appropriate, the Standard is revised to address it.
2008	AS 4822 External field joint coatings for steel pipelines AS 2885.0-2008 General Requirements (new)
2012	AS 2885.1-2012 Design and Construction AS 2885.3- 2012 Operations and Maintenance AS/NZS 2885.5: 2012 Field Pressure Testing The 2012 round of revisions were motivated partly by a desire by then Chair Phil Venton, to harmonise the various Parts, which prior to this had drifted off in various directions and introduced some inconsistencies.
2013	Commencement of projects for major revisions to: AS 2885.1 Design and Construction AS 2885.2 Welding
2015	September 2015: AS 2885.0-2008 Amendment 2 published. In late 2015 or early 2016, we expect to be publish a much-anticipated revision to AS/NZS 2885.2 (Welding)
2016-17	In 2016-17, we expect: AS/NZS 2885.4 Revision (Submarine Pipelines) AS/NZS 2885.0 Revision (General Requirements) AS/NZS 2885.1 Revision (Design and Construction) AS/NZS 2885.6 New Part (Safety Management Study)

5. Underlying Philosophies of AS 2885

There are many reasons for having an Australian standard, some of which are outlined below. The AS 2885 suite of standards is not meant to be regarded as being either an instruction manual for untrained persons, nor is it a complete detailed design specification.

Although certain sections of the Standard contain specific requirements, they do not replace the need for appropriate experience and competent engineering judgement. Fundamental, sound engineering principles should be followed using the principles and practical guidelines of the Standard. It is known as "the thinking person's standard".

Some reasons for a strong Australian-based Standard for gas and liquid pipelines ¹ :	
Keyword	Description
Consensus	Prevents proliferation of different requirements in different jurisdictions.
Ownership / Responsibility	<p>Australian industry personnel have ownership of technical and safety requirements applicable to Australian stakeholders. This includes the technical regulators, and the public at large.</p> <p>AS 2885 is an industry-created standard, and it is referred to in legislation as the single and sufficient Standard. That is, the legislators trust the industry to develop and implement a standard that guarantees public safety.</p> <p>Within the use and application of the Standard, there is a process to ensure proper accountability for all of the decisions that are made requiring a formal approval process for all aspects of design, construction, testing, operation, and maintenance of a high pressure pipeline.</p>
Access / Responsiveness	Local and rapid access to the Committee personnel for training, and for resolution of uncertainties, and correction of errors.
Local Conditions	The Australian landscapes, and its population density conditions, are different to overseas (European and North American) conditions, and the small markets and long distances in Australia dictate the use of different technology, with an emphasis on smaller diameter, high-strength pipe with correspondingly thinner wall.
Age of Infrastructure	On average, Australian pipelines are younger than those in Europe and North America. In the main, they have therefore utilised more modern technology with better quality materials (including coatings) and processes.
Size of Australian Industry	The small number of people involved in the Australian pipeline industry, and the associated regulatory organisations, together with the assistance of Standards Australia and the industry supported Research and Standards Committee (RSC) means that the processes for updating the Australian Standard are relatively very quick, and there is a steady supply of enthusiastic volunteers to undertake the task.

Some reasons for a strong Australian-based Standard for gas and liquid pipelines ¹ :	
Keyword	Description
Relevant Research	<p>The innovative environment encouraged by having our own responsive Standard has helped foster an active and ongoing program of pipeline industry research, which has contributed significantly to the economy and integrity of Australian pipelines.</p> <p>The welding Standard, AS 2885.2, in particular has benefited from this research.</p>
Cooperative Approach, Regulator Involvement	<p>The AS 2885 suite of standards have been developed in a cooperative manner, including the Regulators, who each hold a voting position on the ME-038 committee. This provides the State-based regulators a common framework from which to address local requirements.</p> <p>The regulator's participation on the committees goes a long way to ensuring that the Standard is not in conflict with state-based legislation.</p>
Application of Sound Knowledge	<p>The Standards Australia pipeline committees have used a first principles approach to the development of technical requirements.</p> <p>The Committee has as its catch-phrase that it needs to understand the laws of nature so that it can set down effective laws of man.</p> <p>Therefore, rather than users having a rote prescription or recipe-based approach, AS 2885 requires understanding the basis behind the application in order to properly use it.</p>

6. International Participation

Since the early 2000s, through the APGA Research and Standards Committee, and the ME-038 committees, there has been an effort to be involved in the international technical committee responsible for pipeline-related activities. Standards Australia has a policy of adopting International Standards wherever possible. This policy is in line with Australia's obligations under the World Trade Organization's Code of Practice, which requires the elimination of technical Standards as barriers to international trade. However, where there is no equivalent relevant international standard, local standards still apply (hence, the AS 2885 suite of standards for Australian conditions).

The technical committee ISO TC 67 is the associated international committee that ME-038 monitors, via a representative from the industry who attends the plenary meetings and coordinates the activities required for participation in ISO TC 67.

ISO TC 67's scope is the *standardisation of the materials, equipment and offshore structures used in the drilling, production, transport by pipelines and processing of liquid and gaseous hydrocarbons within the petroleum, petrochemical and natural gas industries.*

Within ISO/TC 67 there are seven subcommittees (SC), listed below. TC 67/SC 02 is of most interest to ME-038:

- SC 01 Line Pipe (disbanded)
- **SC 02 Pipeline Transportation Systems**
- SC 03 Drilling and completion fluids, and well cements
- SC 04 Drilling and production equipment
- SC 05 Casing, tubing and drill pipe
- SC 06 Processing equipment and systems
- SC 07 Offshore Structures

The ongoing intention of ME-038, and the APGA Research and Standards Committee, is to continue our participation in the ISO TC 67/SC 02 activities.

7. Standards Development and Review Cycle

Standards Australia has many pathways available for development of Standards. Basically, since ME-038 based Standards are established, recognised, and in use, we have a well-known approach to revisions.

In order to keep the standards current and timely, the APGA RSC, and ME-038, have committed to reviewing the Standards at least every five years.

ME-038 Technical Committee, since 2013, now meets annually in February, as a plenary session to receive reports from each of the subcommittee chairs, the regulators, and the international standard (ISO/TC 67/SC 02) representative. It is during these meetings that the planning for the next round of reviews is agreed to, among other plenary discussions applicable to all of the Standards that ME-038 oversees.

Once a review / revision requirement is established for a Standard, the subcommittee Chair is responsible for raising a Project Proposal with Standards, which is a set process through Standards Australia. Based on resourcing availability, SA then prioritises projects twice per year, and generally the proposals become projects. For example, in 2015, we have had 3 projects accepted:

- Revision to AS 2885.1
- Creation of new Part AS 2885.6, and
- Revision to AS 2885.4.

In the next 12 to 18 months, the ME-038 Technical Committee will consider commencing revisions to AS 2885.3 Operation and maintenance, and AS / NZS 2885.5 Field pressure testing.

Once a Project is underway with Standards Australia, the subcommittee Chair arranges the review process to take place and works with the Project Manager to progress the review. This usually occurs via meetings, email correspondence, and teleconferences.

The Part 1 revision committee is currently undertaking the writing of a series of over 50 Issue Papers, which are being prepared in order to capture the numerous technical discussions and decisions being made as a course of the Part 1 revision. This process was also done for the 2007 revision; the preparation of Issue Papers is felt to be a very valuable approach. It captures the thought-process of the committee so that the discussions behind some of the decisions or changes are not lost through time and personnel changes.

Once the review / revision process is complete, and the subcommittee Chair believes that the draft standard is ready for public review, it is sent for the Standards Australia "Public Comment" process. This process is typical of most standard organisations, allowing the public to comment on draft standards before they are published.

Standards Australia's public comment timeframe is 9 weeks.

Once the public comment process is completed, the subcommittee Chair is responsible for reviewing and responding to the comments, in conjunction with the Project Manager and the subcommittee personnel. This usually requires a re-convening of the subcommittee to address the comments.

If the comments are easily resolved, and not contentious, the draft standard is finalised and then goes to the ME-038 "Main" Committee for balloting, to agree or disagree to the publishing of the Standard. In some cases, the public comment process or final balloting uncovers technical or interpretation issues within the Standard which require resolution prior to final publication.

8. Closing Comments

This paper has been prepared by the new Chair of ME-038, in an attempt to explain and put the 'big picture' around the AS 2885 Standard, and how it fits within the industry. An important observation coming out of this exercise is that this Standard of ours has been developed by people within the industry, and is passionately managed and maintained by people in the industry. Importantly, we're just people; I've watched over the 10 years that I've been involved in the committees, how we members gather in rooms to go over, in fine detail, the content, wording and possible interpretations of the wording for just about every sentence in the whole Standard under review. This is an enormous task, but one that each

of us on the various committees take very seriously, with a little bit of fun thrown in at times too.

To quote another industry stalwart who has had an enormous influence on the AS 2885 suite, Max Kimber recently observed to me that “we now have another generation taking up the responsibilities behind the AS 2885 Standard, and if we are to continue to use a standard that is developed by the industry and recognised by the statutory authorities, then we have to ensure that we follow the spirit and the contents of that standard in all respects.” Let’s not let down those who worked so hard before us to get the Standard that we deserve.

Please contact me, or any of the subcommittee chairs, if you have any questions, or would like to get involved.

9. References

I would like to acknowledge the use of the following references (and people) in the preparation of this paper:

1. Fletcher et al: “Australian Standard AS 2885: A Modern Standard for Design, Construction, Welding, Operation and Maintenance of High Integrity Petroleum Pipelines” (March 2003, presentation to Joint Technical Committee)
2. Kimber, M.J.: “How Safe & Reliable are Our Pipelines?”; Published in the Australian Pipeliner, November 2003
3. Kimber, M J: “The changing face of the Australian pipeline industry, episode 3”; Australian Pipeliner July 2015.
4. Venton, P: “AS 2885 risk process: history and some thoughts”; Australian Pipeliner July 2015
5. Venton, P: Presentation to Standards Australia at the extraordinary general meeting regarding SG-009 Standards Guidelines and policies, Dec 2014
6. Standards Australia website www.standards.org.au

GWG Extracts of the AS 2885 Standard:

The AS 2885 Standard exists for the safety of the general public, the protection of the environment, and for security of supply. It has been created by industry professionals, technical experts, and researchers, for the purpose of providing an authoritative source of fundamental principles and practical guidelines, to be used by responsible and competent persons and organisations.

Most pipelines to which this Standard applies will be designed, constructed, tested, and operated under some form of license or regulation, and the Standard does not supersede or take precedence over the requirements of any Statute or Regulation.

* * * * *

The AS 2885 Standard is not an instruction manual for untrained persons. It is not a detailed design specification; appropriate experience and competent engineering judgement are the foundations of the Standard.

Pipelines designed to AS 2885 are required to have sufficient strength to withstand all forces to which it will be subjected during construction, testing, and operation.

* * * * *

The Licensee, a defined entity that the regulatory body holds accountable for the pipeline, is responsible for the safety of the pipeline. This includes responsibility for the engineering design, construction, and maintenance of pipeline integrity during operation.

* * * * *

If changes occur in relation to the pipeline, appropriate steps are to be taken to assess and resolve those changes in order to maintain safe operation for the pipeline.

* * * * *

All threats to the pipeline will be identified and either controlled, or the associated risks will be evaluated and managed to an acceptable level, and the design is reviewed and approved.

* * * * *


At the end of its system designed life, the pipeline is to be abandoned unless an approved engineering investigation determines that its continued operation is safe.

* * * * *

1.3 RETROSPECTIVE APPLICATION

The Australian Standards for pipelines are subject to continuous improvement, and when a new edition of a Standard is published, the new edition should be reviewed by the Licensee to identify opportunities for improvement of existing systems.

Publication of a new Standard or new edition of a Standard does not, of itself, require modification of existing physical assets constructed to a previous Standard or edition to a Standard.

A large, stylized 'C' shape, composed of three concentric black and white arcs, is positioned on the left side of the page, partially overlapping the title text.

Investigations of land use around pipelines to guide initial location classification under AS 2885 guideline

August 2014

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The Australian Pipelines and Gas Association would like to acknowledge the input from the Pipeline Corridor Committee during the development of this guideline. Special thanks go to the participants in the Guideline Working Group: Craig Bonar (APA Group); Mick Cave (APA Group); Jodi Gratton (KD1); James Maldon (Jemena); Peter Tuft and Phil Venton.

1 Introduction

Transmission pipelines have long operational lives, in excess of 40 years, and the environments around them change over time. These changes are likely to have effects on a pipeline. In the short term, change will be associated with increased construction activity and its associated risk, in the long term change may alter the risk profile of a pipeline. This is particularly true on the urban fringe of towns and cities where population growth and housing pressures lead to increasing expansion of urban boundaries and the transformation of rural and semi-rural land into suburban and urban environments containing residential, commercial and industrial communities.

Under Part 1 of the Australian Standard for gas and liquid petroleum pipelines, AS 2885, a pipeline licensee must, at the time of construction, design a pipeline to have due consideration of the risks to the pipeline from the surrounding environment and the potential management of consequences associated from a pipeline failure. Due consideration of the risks is achieved through the conducting of a safety management study (SMS).

AS 2885 further requires the pipeline licensee to classify the type of wide-ranging geographic and demographic characteristics at all points along the pipeline for a specified distance, the measurement length either side of the pipeline. These characteristics are defined within two categories:

- a Primary Location Classification; and, where necessary,
- a Secondary Location Classification.

A thorough initial investigation should also be taken as an opportunity to build relationships with planning and development stakeholders that can influence future land use around the pipeline. It should be used as an important first step in raising awareness of the pipeline, risk management and the requirements of AS 2885 with relevant stakeholders. Pipeline licensees should note that ongoing engagement with relevant stakeholders is a requirement of AS 2885 Part 3 and the land use investigation can be used to establish the relationships that will be required to do so.

If there is a change in the pipeline location classification, or construction activity is proposed on or adjacent to a pipeline corridor/easement, AS 2885 requires an additional SMS to be undertaken. The SMS should incorporate a location class review, pipeline risk assessment and a review of the possible mitigation measures set out in AS 2885.1 Section 4.7.4. As a location classification changes, the level of pipeline protection required may increase to ensure the risk to persons, property and the environment are minimised.

2 Purpose

The purpose of this guideline is to provide advice to pipeline designers and other stakeholders on the conducting of investigations into land use around pipelines (hereafter called land use investigation), both existing and future, to ensure the best available information is used through the land use investigation to assign location classifications.

The location classifications that are assigned to sections of the pipeline from the information in the land use investigations area are a fundamental input to a pipeline's design parameters and so it is

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important that the land use investigations are robust for the long term. The consequences of an inadequate land use investigation can result in significant cost to a pipeline and the community over the lifetime of the pipeline.

AS 2885 Part 1 sets out:

4.2 ROUTE

4.2.1 General

The route of a pipeline shall be selected having regard to public safety, pipeline integrity, environmental impact, and the consequences of escape of fluid.

A new pipeline shall be designed in accordance with the requirements of this Standard –

- (a) for the land use existing at the time of design; and*
- (b) for the future land use that can be reasonably determined by research of public records and consultation with land planning agencies in the jurisdiction through which the pipeline is proposed.*

The land use for which the pipeline is designed shall be documented and approved.

For an existing pipeline, changes in land use from those for which the pipeline was designed introduce an obligation for a safety management study of the pipeline and where required, the implementation of design and/or operational changes to comply with the safety obligations of the Standard.

4.2.2 Investigation

A detailed investigation of the route and the environment in which the pipeline is constructed shall be made. The appropriate authorities shall be contacted to obtain details of any known or expected development or encroachment along the route, the location of underground obstructions, pipelines, services and structures and all other pertinent data.

This guideline is specifically targeted at ensuring the pipeline design shall be informed by the best available information pertaining to:

- land use existing at the time of design;
- future land use that can be reasonably determined by research and consultation; and
- known, proposed or expected development or encroachment along the route.

It will not address other elements of the route investigation required under AS 2885 Part 1, including key considerations such as native title, cultural heritage and environmental issues.

It should be noted that this guideline is primarily focussed on the land use investigation required by AS 2885 during pipeline design. AS 2885 also requires ongoing location classification reviews. While much of the information presented in this guideline will be useful to a location classification review, those reviews are more focussed on existing land use rather than future land use as an existing pipeline will base its risk management on current land use only.

3 Persons conducting land use investigations

As for all aspects of AS 2885, it is necessary that pipeline licensees ensure land use investigations are informed and signed off by appropriately qualified and experienced persons.

It is recommended that a multi-disciplinary team is assembled to conduct a land use investigation, bringing together a range of views and expertise to guide the project. In particular, the persons conducting the investigation should be aware of the expertise that may be lacking, so that particular attention can be given to those areas where additional guidance may be necessary.

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The complexity of environments that a pipeline will pass through must be understood and accounted for when determining the qualifications and skills required to conduct a thorough land use investigation. Urban environments and their fringes will have more planning issues to be explored and understood than remote regions (which may offer their own complexity in terms of environmental requirements). It is appropriate that all land use investigations have some level of guidance from property and/or planning professionals, with land use investigations in and around urban environments requiring a high level of engagement from professionals with these skill sets.

4 Components of a land use investigation

There are three key components in a land use investigation:

- Desktop review of existing planning systems, land uses and appropriate documents (strategies, policies, zoning controls, etc) in the vicinity of the pipeline;
- Consultation with stakeholders that can improve the understanding developed through the desktop review and provide further insight; and
- Assessment of the information obtained and of the land in the vicinity of the pipeline.

These components are not strictly sequential; it is likely some overlap will occur across all three. Before commencing the land use investigation, a specification document should be prepared, detailing the process to be followed and outcomes to be achieved.

5 Desktop Review

The desktop review focusses on developing an understanding of the existing planning systems and land uses in the vicinity of the pipeline through a review of published information. The information reviewed should cover:

- the planning framework;
- zoning controls and policies;
- existing land uses;
- proposed zoning and policy changes; and
- strategic future plans across Federal, State and local governments.

There are a range of published sources that should be considered when researching current and future land use around a pipeline. These can broadly be categorised into two categories:

- strategic planning documents; and
- regulatory 'control' planning documents.

The exact nature of each will vary across jurisdictions.

5.1 The planning framework

To conduct an effective land use investigation, it is necessary to understand the planning framework in the jurisdiction(s) in which the pipeline is to be located. Relevant aspects of planning frameworks include:

Statutory framework

- the role of State and local government regulations;
- the hierarchy of state, regional and local plans; and
- treatment of pipelines in jurisdictional planning regulations.

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Decision makers/influencers

- government stakeholders in planning decisions; (ie councils, statutory planning authorities, referral agencies with directive powers such as the EPA , transport departments, growth area authorities)
- responsibilities of the State Planning Minister, other Ministers and Parliament;
- responsibilities of the Federal Government
- responsibilities of the State Government;
- responsibilities of Local Government in the jurisdiction;
- peak bodies such as local government associations, the Property Council, National Growth Areas Alliance, Urban Development Institute of Australia; and
- major land owners.

There should be particular emphasis on recognising elements of the planning framework that have relevancy in determining future land use.

A clear understanding of the planning framework in the jurisdiction(s) will assist with identifying documents for research and stakeholders for consultation.

As an example, a stakeholder road map will assist in identifying key government/business departments and agencies that have direct influence over future land use, thus enabling design and future consultation to be targeted to appropriate constituent organisations in order to achieve the clearest understanding of potential changes.

5.2 Strategic planning documents

Strategic planning documents are an important source of information for existing and future land use, setting out a vision for future development uses such as:

- areas of urban growth and redevelopment;
- transport/infrastructure corridors;
- business and industrial centres; and
- other areas of interest such as environment corridors etc.

Strategic planning documents are typically long term in vision, with an outlook ranging up to 30 years, setting forward a pathway for development. They are likely to also include short-term and medium-term strategies with information detailing actions and priorities to achieve the overall long-term objective and vision. This is an excellent starting point for understanding the potential land uses identified for a particular area for the future.

It is essential that relevant strategic planning documents are identified and their hierarchy is understood. In a jurisdiction there may be strategic planning documents at varying levels including:

- Commonwealth;
- State or Territory;
- regional;
- local government jurisdiction;
- capital cities or major urban centres;
- industrial centres; and
- development master plans.

Any draft plans available should also be reviewed. These are generally notified in classified advertisements of major newspapers for the area and on the relevant council's website. (Note: It would be prudent to check council's websites monthly for this material as it may not coincide with a pipeline investigation process).

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The Council of Australian Governments Reform Council conducted a review of capital city strategic planning systems in 2011¹. This document sets out the purpose of strategic planning systems, their importance and summarises and assesses the strategic planning systems of each capital city in Australia. It is a useful introductory document for those wishing to better understand strategic planning systems.

5.3 Local planning regulations

Local or town planning regulations (also development plans, zoning plans and overlays) define the zoning of each region in the jurisdiction setting out the permitted land uses. This instrument is the primary source of currently anticipated land uses and will often flag future developments at a local level. Detailed understanding of permitted or contemplated land uses is essential to developing an effective land use investigation.

The zoning framework of a local planning regulation typically defines characteristics that are fundamental to performing a location classification under AS 2885:

- population density; permitted land uses; and
- structure or concept plans for future land use and infrastructure.

Land use zone definitions will typically include a qualitative objective which should be documented in the investigation to provide an understanding of land use intentions.

The management of local planning regulations is typically overseen at a local government level. Each State and Territory has high level planning policies that establish a level of consistency across local planning regulations. However, there can be a range of different approaches local governments take to manage particular issues. The role and flexibility of local planning regulations differs across States and this must also be accounted for.

Most pipeline corridors will cross multiple local planning jurisdictions and will need to be cognisant of the differences that exist between local government jurisdictions.

Areas covered by local planning regulations that can increase the potential for location classifications to change over time include zoning for sensitive uses and the permissible density of a block.

5.3.1 Sensitive use

The permissible uses of each zoning type defined in a local planning regulation should be understood clearly. The 'sensitive use' secondary location classification in AS 2885 covers a wide range of uses, some of which, such as aged care facilities, schools, community centres and child care centres, are often encouraged under residential zoning classes.

5.3.2 Permissible density of a block

It is important that the land use investigation record the permissible density of blocks. Many zones allow for a variety of densities within the one zone. Land that is currently rural and used solely for agricultural purposes may be zoned such that it allows sub-division to semi-rural density without public consultation or special approval processes. Similarly, a location that is largely low-density housing may be zoned such that it could evolve to medium-density housing over the life of a pipeline without any planning changes. It is critical to identify minimum lot sizes if stipulated.

¹ <http://www.coagreformcouncil.gov.au/reports/capital-cities/review-capital-city-strategic-planning-systems>

6 Consultation

In addition to published sources of information, consultation and enquiries are essential to achieve the best possible understanding of current and future land uses in an area.

Relevant stakeholders and their responsibilities should be identified and engaged to access detailed understanding of existing and future land uses. Stakeholder consultation with State and local planning agencies is especially important to understand the likelihood of future land uses as detailed in strategic plans and to gauge the potential for unforeseen land use changes to occur. Consultation with these stakeholders can also be used to detail processes to change zoning of land, which can help assess the likelihood of land use changes occurring in the future.

Inquiries should not only be limited to planning agencies. A variety of government departments and agencies either own large amounts of land and/or can influence land use in the future (such as Defence, water and electricity companies/departments, urban renewal authorities, education and economic development departments).

Consideration should be given to engaging private development and planning stakeholders. This may enable a licensee to develop an understanding of areas that have not been flagged for development but are subject to speculation by the development community, with a long-term intention of advocating for its development.

The consultation process should also include the landowners and adjacent/surrounding landowners. Understanding landowners' future plans for their properties is an essential aspect of gathering information for input to the SMS process. There is the potential for a landowner's future plan to be inconsistent with the information gathered from planning stakeholders.

The land use investigation team should prepare a consultation strategy plan that clearly sets out the purpose of each consultation session and the areas of information that each stakeholder can usefully provide.

Multiple consultations with key stakeholders throughout the land use investigation will ensure information has been received, understood and interpreted correctly.

7 Land use assessment

Once an understanding of land use along a pipeline route has been developed, it should be assessed and documented. The process of assessing the information gathered during the desktop review and consultation components of the investigation is essential to forming a view on likely future land uses.

The assessment of the land under consideration should include:

- ownership patterns;
- current values (site and capital) and trends in land values;
- current uses and trends; and
- infrastructure and economic return.

This will ascertain:

- land uses that are under-performing; and
- the likely highest and best land use (ie the land use that provides the best economic return). This provides a good indication of land uses that are likely to be under pressure to change. Land on the fringes of townships and cities is most likely to be under pressure and the most likely future land use will be an urban use.

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A detailed assessment allows the land use investigation to clearly set out current, permissible, proposed and possible future land uses for land in the vicinity of the pipeline route. Current and planned sensitive uses and major infrastructure should also be documented.

When documenting possible future land uses, an attempt should be made to assign probabilities, even if high level (high, medium, low), and timeframes to assist with risk assessment and pipeline design. An area that is assessed as having a medium probability of changing in the long term may be deemed an acceptable risk that addressed in the initial design.

As a further consideration, a pipeline's design life is often longer than the forward timeframes considered in planning documents. It is highly likely that a land use investigation will have to draw conclusions about future land use further out than the typical maximum 30-year outlook provided in high-level strategic planning documents.

8 Location Classification mapping

The location classifications defined in AS 2885 are qualitative in nature to allow them to be readily adapted to the wide range of planning jurisdictions that pipelines pass through.

The process of mapping location classifications to the land uses identified in a land use investigation should be rigorous and documented to ensure it can be understood in the future. It is recommended the location classification mapping exercise explicitly recognise the planning, land use and zoning definitions of relevant jurisdictions and map these definitions to location classifications. This will enable improved communication between the pipeline and planning stakeholders.

Particular attention should be paid to current, permitted and proposed and possible future land use, the likelihood of change and the potential for any change to impact the pipeline design. In rural regions, land that is currently used for agriculture purposes may already be zoned to allow subdivision to a density that would change a location classification from R1 to R2. A pipeline licensee will have to analyse the likelihood of this, and other possibilities (such as a rezoning), happening and the costs associated with managing the risk in initial design or at a later date.

Where future land use differs from existing land use and is readily identifiable (ie documented in a strategic planning document), location classifications must be based on the future land use. Where future land use is not readily identifiable, a pipeline licensee must use judgement when assigning location classification.

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Important note on use of the Investigations of land use around pipelines to guide initial location classification under AS 2885 guideline.

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Investigations of land use around pipelines to guide initial location classification under AS 2885 Guideline 1

TECHNICAL

Letter to the Editor

Re: The Australian Pipeliner, April 2017 "Reasonably Practicable – a help or a distraction in ensuring public safety" by Jan Hayes and Richard McDonough

I disagree with the notion that the risk to workers or the public must be *As Low As Reasonably Practicable (ALARP)*.

The risk must be *Low* or *Negligible*.

ALARP is an alternative only when *Low* or *Negligible* cannot be achieved.

As is shown in Figure 1 in the April edition, *Formal ALARP Assessment* is only accessible where risk is *Intermediate*, no higher.

On this basis I ask the authors to explain how it is that after land use change to *High Consequence* so that the *Severity Class* can be *Catastrophic* because of high population density with houses, schools and shopping centres within the consequence distance, that risk can be assessed as *Intermediate*.

There have been sufficient ruptures of natural gas pipelines here and overseas to make certain that the frequency class cannot be lower than *Unlikely*, or in the very best case *Remote*, and so there is no option but to rank the risk as *High* and adopt the *Treatment* of modifying *Threat*, *Frequency*, or *Consequence*.

And this *Treatment* must be undertaken *within a few weeks*, not years later.

The proverbial judge acting with hindsight after a catastrophic accident with multiple fatalities, large numbers of injuries, and

long term interruption to supply will not only examine the adequacy of an ALARP determination, he or she will also look at the whole of the risk assessment and undoubtedly will take the view along with AS 2885 that *Mandatory* requirements for the *elimination of rupture* and *maximum energy release rate* were required to have been implemented.

We have had it demonstrated recently in a rupture in South Australia that ALARP determinations are fallible human judgements and are not a substitute for sound engineering solutions needed to protect life.

That rupture could just as easily have occurred in a high consequence area in Adelaide with catastrophic consequences.

There are also susceptible locations in other Australian cities in pipelines built nearly 50 years ago that don't meet modern standards.

AS 2885 has been adopted as a single and sufficient Standard by the Council of Australian Governments.

It is L-A-W Law. The requirement for no rupture and maximum release rate is law.

Sincerely,
LEIGH FLETCHER

Author's response

By Jan Hayes, Associate Professor, School of Property, Construction and Project Management, RMIT University and Richard McDonough, Senior Project Engineer, GPA Engineering.

Leigh's letter affords the opportunity to address some misconceptions that may persist in the industry with regard to the current requirements of AS 2885 and also how these are being addressed by the current review process.

It also needs to be acknowledged that we're all trying to ensure that the public and workers are safe from pipeline accidents.

General comment on proposed changes to AS 2885

AS 2885.1 is currently under review. With respect to the safety management study process, the proposed changes are intended to improve the rigour with which this is carried out.

It needs to be emphasised that there is no change to the fundamentals of the Safety Management Study (SMS) process as it has existed since it was first introduced in 1997.

This includes the principle that the first obligation is to identify threats to pipeline integrity and 'eliminate' them or 'engineer them out' (in simple terms), and that formal risk assessment is only required as a last resort (not a first resort) for the small number of cases where this cannot be achieved (i.e. there is no suggestion that we are allowing risk assessment to be used as a tool to justify less than the good practice as expressed in AS 2885 and the associated standards).

AS 2885 requirements for elimination of rupture and maximum energy release rate

Since 2007, AS 2885 has included Section 4.7 'Special Provisions for High Consequence Areas'. This includes Cls 4.7.2 'No Rupture' (or "elimination of rupture" as identified in Leigh's letter), Cls 4.7.3 'Maximum Discharge Rate' ("maximum energy release rate" in Leigh's letter), and Cls 4.7.4 'Change in location class'.

These provisions apply to pipelines designed to AS 2885.1-2007 and subsequent revisions. In short, for pipelines designed since AS 2885.1-2007 was published it is mandatory to comply with Cls 4.7.2 and Cls 4.7.3. If changes in land use occur after a pipeline is designed and constructed, then Cls 4.7.4 requires that:

"Where there are changes in land use planning (or land use) along the route of existing pipelines to permit *Residential*, *High Density*, *Industrial*, or *Sensitive* development or *Heavy Industrial* development in areas where these uses were previously prohibited, a safety assessment shall be undertaken and additional control measures implemented until it is demonstrated that the risk from a loss of containment involving rupture is ALARP." »

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THE CONCEPT OF ALARP AS IT IS CURRENTLY PRESENTED IN AS 2885 IS OUT OF DATE AND INCONSISTENT WITH GENERAL WHS LEGISLATION THAT APPLIES IN AUSTRALIA.

For pipelines designed and constructed prior to the AS 2885.1-2007 revision, Cls 1.4 requires that:

"Each existing pipeline shall be assessed against the requirements of Clauses 4.7.2 and 4.7.3. Where the existing pipeline does not comply with either Clause, mitigation shall be applied in accordance with Clause 4.7.4 regardless of whether or not there has been a land use change."

So, for pipelines designed and constructed prior to the AS 2885.1-2007 revision, it is a requirement that it is demonstrated that the risk from a loss of containment involving rupture is ALARP in high consequence areas. This obligation has been in place since AS 2885.1-2007.

It is not correct to imply that AS 2885 has ever required that all pipelines in high consequence areas are required to meet the 'no rupture' and 'maximum discharge rate' in all circumstances.

General obligations under Australian law

Regardless of whether or not legislation in individual jurisdictions specifically reference AS 2885 (and this varies between jurisdictions), there is a general obligation under Work Health and Safety (WHS) legislation in Australia that includes a general duty on pipeline licensees that risk is reduced so far as is/as low as reasonably practicable.

This obligation stands over and above AS 2885 which provides a detailed pathway as to how that obligation should be met.

ALARP in AS 2885

The concept of ALARP as it is currently presented in AS 2885 is out of date and inconsistent with general WHS legislation that applies in Australia.

Under this legislation ALARP is not a higher level of risk than 'low'. Rather, it is an overarching concept that acknowledges that safety always comes at a cost and that companies are required to find the right balance based on the level of risk involved and the cost of reducing it further.

This is explained in some detail in the final report to the Energy Pipelines CRC 'Project RP4.21A: Understanding ALARP' (Rev 0, August 2015), and also the Australian Pipelines and Gas Association (APGA) 2016 Paper *Reasonably practicable – a help or a distraction in ensuring public safety?* by Jan Hayes and Richard McDonough, and so is not repeated here.

The proposed changes to AS 2885 broaden the use of the term ALARP (as it is currently used in AS 2885) so that it is consistent with the general legislation that applies in Australia.

There are three routes to ALARP:

- I. The threat is controlled in accordance with AS 2885; or,
- II. The residual risk is assessed to be Low or Negligible; or,
- III. The residual risk is formally demonstrated to be ALARP.

Currently, one of these three routes is used to demonstrate risks imposed by the pipeline are "accepted".

In short, the terminology has changed, but the process has not.

The subject of article in the April 2017 issue of *The Australian Pipeliner* is the guidance on how "residual risk is formally demonstrated to be ALARP", which, experience shows, is a requirement for a relatively small proportion of pipeline threats.

Guidance on formal ALARP assessment

The Australian pipeline industry has recognised that, in the past, it has grappled with the requirement for 'formal ALARP' assessments.

In response, the industry commissioned the research which is documented in 'Project RP4.21A: Understanding ALARP' (Rev 0, August 2015).

It is proposed that the outcomes of this research are included as guidance in the next revision of AS 2885. The application of this guidance is discussed in the APGA 2016 paper *Reasonably practicable – a help or a distraction in ensuring public safety?* by Jan Hayes and Richard McDonough.

This guidance has been used by a number of pipeline companies and has proved to be useful. It provides for a detailed assessment of a broad range of factors that need to be considered, and as such provides for more considered decision-making about actions required to mitigate risk.

The purpose of this work and the proposed changes to AS 2885 is to provide better tools for the industry to conduct formal ALARP assessments, and to drive a more rigorous, consistent and traceable approach than has been applied in the past. Based on the experience to date, indications are that this is being achieved.

It is important to acknowledge that, in the small number of cases where formal demonstrations of ALARP are required, they are indeed based on judgement. The proposed guidance is intended to generate as much information as possible on a broad range of factors that need to be weighed in balance (rather than relying on a single formula which generates a simple cost benefit analysis, which in the experience of the industry tends to preclude mitigation measures which otherwise should be implemented).

By their very nature these are the situations in which risk and cost are both significant and so the appropriate trade-off is not straightforward. Evaluation of such cases will always be judgement based.

Following this, it needs to be acknowledged that engineering solutions always involve judgement too. While new pipelines in urban areas are to be designed for 'no rupture', built into that calculation are informed judgements and assumptions about the maximum credible threat and the maximum defect length.

The determination that a pipeline design satisfies 'no rupture' »

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doesn't mean that it cannot rupture under any circumstances but rather engineers have used their judgement as to the maximum defect length in designing the system and the pipeline should not rupture if it is operated and maintained consistent with that (which involves another set of judgements and assumptions).

Guidance on risk assessment

Leigh's argument is predicated on his interpretation of the frequency classes in Table F3, and his judgement that the frequency of a "catastrophic" event is "unlikely" at worst and "remote" at best for a number of pipelines in Australia so that a number of pipelines present a high risk to the community.

It is recognised that the frequency class descriptions in AS 2885 are open to subjective judgement and that different people will interpret them differently. This was recognised in the original HB105 companion document, which provided numerical guidance to assist with the interpretation of frequency class descriptions.

This numerical guidance was not included in the 2007 and 2012 revisions, but some practitioners have developed their own guidance based on both HB105 and other published numerical targets such as the NSW "Hazardous Industry Planning Advisory Paper No 4 Risk Criteria for Land Use Safety Planning" (HIPAP4).

For this revision of AS 2885, we are providing numerical guidance to assist in the interpretation of the frequency descriptions:

- The numerical guidance is based on a review of gas transmission pipeline incident data published by the European Gas Pipeline Incident Data Group (EGIG) and the US Department of Transport.
- The numerical guidance is also calibrated against published societal risk criteria in the UK and Netherlands (the only countries that I can find that publish such criteria)
- The numerical guidance proposed for AS 2885 is set some margin below both the actual performance in Europe and the USA and also the published risk criteria, so that it is hard to argue that we are "soft" on risk assessment or safety.
- The numerical guidance proposed for AS 2885 is broadly consistent with the HB105 targets and others used on the Australian pipeline industry in recent years.
- AS 2885 will also provide guidance on how the numerical guidance can be used in a risk assessment (again, we are providing guidance where previously there was none, with the aim to providing industry with a more rigorous, consistent and traceable approach)

The principle that underlies the SMS process in AS 2885 is that based on identifying and controlling specific threats to specific pipelines in specific locations.

While we cannot ignore the general lessons from incidents such as San Bruno (which was a result of the characteristics of that particular pipeline), to suggest that pipelines which are demonstrably not subject to the same failure mechanism are equally risky, is not reasonable and totally at odds with this principle.

Other industry initiatives

Other initiatives to assess and improve the general safety management of pipelines include:

- Energy Pipelines CRC Project RP6.4-01 *Benchmarking the AS 2885 Safety Management Process* – this project compared the AS 2885 SMS process against alternative computationally-based risk evaluation methods and found that the results produced were consistent with those other methods
- Energy Pipelines CRC Project RP4-20A *Third Party Risks to Pipeline* – this project investigated third party risks to pipelines including work practices near pipelines, land use planning around pipelines and awareness of the potential for damage, resulting in a guidance note to pipeline licensees (owners/operators) on communication with third party and non-industry stakeholders
- Energy Pipelines CRC Project RP4-25 *Effectiveness of External Interference Protection Controls* – this project is looking broadly to new technologies and options for reducing pipeline risks, particularly in encroachment situations.
- Introduction of the new AS 2885 Part 6 *Safety Management* – which introduces inter alia the requirement for a high consequence recognition statement to be approved by the licensee (an article summarising the new Part 6 is to be included on the following page).

Conclusions

In summary, the proposed changes to AS 2885 bring the Standard more into line with the legislation that refers to it (and the proposed changes have been strongly supported by the regulators in most states as a result).

The changes also provide much more guidance than is currently available on how to deal with cases where (often due to encroachment) existing pipelines pose a higher risk than a new pipeline would in the same location and bringing the old facilities up to the new standard is unreasonably expensive.

These and other changes introduced in the new AS 2885 Part 6 *Safety Management* have been made with the objective to assist the Australian pipeline industry to maintain and improve the safety record that has been achieved to date. ■

THE CHANGES PROVIDE MUCH MORE GUIDANCE THAN IS CURRENTLY AVAILABLE ON HOW TO DEAL WITH CASES WHERE EXISTING PIPELINES POSE A HIGHER RISK THAN A NEW PIPELINE WOULD IN THE SAME LOCATION AND BRINGING THE OLD FACILITIES UP TO THE NEW STANDARD IS UNREASONABLY EXPENSIVE.

ATTENTION G.M.G. PLEASE HAVE WELL

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THE AUSTRALIAN PIPELINER | JULY 2017

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TECHNICAL

New standard for pipeline safety management

By Peter Tuft, Chair, ME-038-01 subcommittee

AS 2885 is undergoing its periodic revision process with most parts due for an update. The biggest change in this round of revisions is the introduction of a new Part 6 to hold all the safety management requirements.

Part 6 and the revised Part 1 should be released for public comment in July, and will be presented to the industry in a launch seminar on 19-20 July in Sydney. In this article I want to give you a head start on some of the main Part 6 changes: I will briefly cover a broad overview of Part 6 content, discuss the ALARP principle (As Low As Reasonably Practicable), then provide some detail and justification for a new concept for management of high-consequence failures.

To date, the safety management rules have been in Part 1 (Design and Construction) and hence have had a focus on safe design of new pipelines. However a majority of safety management studies are done for existing pipelines (which belong under Part 3) and the safety management process is even used in the preparation for some hydrostatic tests (Part 5). So it seemed appropriate to make safety management a stand-alone part of the AS 2885 suite. The basic process for safety management will remain unchanged despite the broader focus of the new Part 6.

The Part 6 table of contents will look like this:

1. Scope and general (including general requirements such as documentation, implementation and validation).
2. Classification of locations (moved from Part 1, largely unchanged apart from one new secondary location class).
3. Safety management process (moved from Part 1, also largely unchanged).
4. High consequence recognition (new requirements, discussed below).
5. ALARP (revised principle and process).
6. Application of safety management (extensive requirements and guidelines for each phase of the pipeline lifecycle, including both design/construction phases and operational phases).

Appendices will provide guidance on every aspect of the safety management process:

- a. Reference documents.
- b. Flow charts.
- c. Threat identification (completely rewritten).
- d. External interference protection (moved from Part 1, largely unchanged).
- e. Effectiveness of procedural controls (moved from Part 1, expanded with work from EPCRC RP4).
- f. Frequency estimating guidelines (new, includes numerical guidelines and a worked example).
- g. Consequence assessment (new, with a worked example).
- h. High consequence recognition (new, with an example).
- i. ALARP (new guidelines).
- j. Integrity of the safety management process (moved from Part 1, largely unchanged).

ALARP is a concept that has a history dating back many decades if not centuries. It has been well covered by Jan Hayes and Richard McDonough at both last year's Australian Pipelines and Gas Association (APGA) Convention and in the April issue of



Peter Tuft.

the *Pipeliners*, so I won't repeat that at length. Suffice to say that the use of ALARP in the current AS 2885.1 is idiosyncratic and not consistent with the way that the concept is understood and used in the wider world of the law and workplace safety. That caused significant misunderstanding in some quarters.

The ALARP concept in AS 2885 will now be aligned with the common understanding of the term and has become the objective of safety management – all risks shall be ALARP.

From the definition in Part 6:

"A risk associated with a threat is deemed ALARP if the threat is controlled, or the residual risk is assessed to be low or negligible, or the residual risk is formally demonstrated to be ALARP."

In practice, not a lot will change. What will now be called formal ALARP assessment ("FAA" might become a new acronym) will still be required where ALARP assessment is currently mandated plus some other situations:

- Intermediate risks (same as currently)
- New high-consequence areas around existing pipelines (equivalent to the current Part 1 Clause 4.7.4)
- Existing pipelines not complying with current fracture control requirements (more details to come in Part 3 and perhaps a topic for another time)
- Uncontrolled threats during encroachment works (expected to be rare)

Part 6 will include extensive guidance on how to do formal ALARP assessment and there is useful advice in the April *Pipeliners* article too. »

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AUSTRALIAN PIPELINES HAVE AN EXEMPLARY SAFETY RECORD. HOWEVER, COMMUNITY EXPECTATIONS FOR SAFETY RISE INEXORABLY.

A new concept in Part 6 is a requirement for senior management recognition of potential high-consequence failures. This arises from work on the sociology of safety (such as Energy Pipelines CRC Research Program 4) and particularly from the work of Professor Andrew Hopkins on the underlying causes of failures such as the BP Texas City Refinery disaster and Deepwater Horizon.

In these examples the top management had lost sight of the potential for catastrophic failure and had diluted relevant safety resources to the point where the failures became possible. Of course other factors contributed as well to these complex situations, but management awareness of safety was a salient shortcoming.

In Part 6, high-consequence recognition will be triggered for any pipelines section where:

- Pipeline failure could cause multiple fatalities (or, less often, catastrophic supply disruption or environmental damage), and
- An SMS is done for detail design, scheduled operational review, land use change, or change in operating conditions that increases measurement length

Where these conditions are met, the new rules require that the Licensee approve (and not delegate) a statement recognising the worst-case consequences of pipeline failure (regardless of probability or controls in place) as well as confirming conformance with certain key elements of the safety management process and stating that risk control measures are adequately resourced.

This is not intended to be an onerous requirement. We are well aware that some licensees are responsible for many pipelines. The high-consequence recognition statement need only be brief, and Part 6 recommends brief supporting information that should be provided to Licensees before they sign (rather than the entire SMS report).

There are multiple reasons for introducing this requirement. Although AS 2885 deals primarily with technical matters, if we wish to maintain and continually improve the safety performance of pipeline systems we cannot ignore human and organisational factors. These aspects are prominent among the elements contributing to disasters involving technological systems.

Research into the sociology of safety shows that in almost all such cases the responsible organisation, and particularly senior management, had not given sufficient priority to safety and the associated resources that might have prevented the failure, usually because of a lack of awareness of the possibility and consequences of failure.

A useful concept from the sociology of safety is the high-reliability organisation (HRO). HROs operate safely and successfully in industries that at face value have ample potential for disaster, such as airline operations, air traffic control and nuclear power. To be classed as an HRO an organisation should possess several traits of which perhaps the most important is sensitivity to, or preoccupation with, the possibility of failure. An organisation that operates in a hazardous industry but does not adequately appreciate the potential for catastrophe can never be a

high-reliability organisation. A third argument from the sociology of safety is the observation that managers find there is a significant difference between merely receiving information and being required to sign their name to it.

In practice, the licensee is usually an organisation and the statement will be approved by a senior manager as the authorised representative of the organisation. Provided that the licensee's representative is sufficiently senior the objective of management awareness should be achieved. For licensees whose core business is pipelines, the awareness requirement may appear redundant. However, many pipelines are operated by businesses whose primary focus is elsewhere and whose management may not have the necessary awareness of the potential for pipeline disaster.

AS 2885 already requires (and will continue to require) that certain key SMS reports are approved by the licensee and not delegated. However, that does not necessarily achieve the objective of senior management awareness. Most SMS reports are large documents which, in the absence of the requirements for high-consequence recognition, may or may not include relevant information in the summary. In particular, it is normal for an SMS report to conclude that all risks are either controlled or ALARP and for the summary to contain little or no mention of the potential worst-case consequences of failure. The high consequence recognition requirements give prominence to information that should be brought to the attention of senior management.

High consequence recognition will be required even if no threat capable of causing catastrophic consequences has been identified and even if the SMS indicates that threats capable of causing catastrophic consequences are controlled. This is analogous to the well-established reasoning behind the adoption of the measurement length as the basis for location classification: the cause and likelihood of failure are irrelevant, what is important is the fact that if a failure occurs then the consequences may be extreme.

It is unwise to put absolute reliance on the findings of an SMS that there was no identified threat capable of causing catastrophic consequences because, despite sincere efforts, the SMS may have overlooked a significant threat. Such omission may be a simple oversight or may be a 'black swan' event: largely unforeseeable (at least by those responsible for protecting against it), having extreme effects, but readily explicable after it has occurred. Most major failures involving technological systems meet these criteria for a black swan event.

It is even more unwise to put absolute reliance on the controls intended to prevent failure arising from identified threats. This applies particularly to procedural controls. Physical controls can often be relied upon to provide complete protection against threats up to a certain magnitude, but unexpected larger threats may still cause failure.

Australian pipelines have an exemplary safety record. However community expectations for safety rise inexorably. We hope that the new Part 6, and particularly high-consequence recognition, will match those rising expectations. P



Planning | Development | Management

3 December 2019
Our Ref: 1424

The General Manager
Goulburn Mulwaree Council
Locked Bag 22
GOULBURN NSW 2580

Dear Sir or Madam

**Submission to DRAFT Urban and Fringe Housing Strategy
515 Crookwell Road Kingsdale**

Precise Planning is representing the owner of a property known as 515 Crookwell Road Kingsdale ('**subject land**'). The subject land is contained within the study area of the Draft Urban and Fringe Housing Strategy ('**draft strategy**').

It is noted that a revised version of the draft strategy has been placed on public exhibition from 16 October 2019 to 13 December 2019. This document is a submission in relation to the revised draft strategy, on behalf of the registered proprietor of the subject land.

Precise Planning made a submission to the original draft strategy on 3 March 2019. In that submission, the articulated a case for the subject site to be included in the draft strategy, earmarked for rural residential development (R5 Large Lot Residential zone, although the same outcome could be achieved with an RU6 Transition zone or an E4 Environmental Living zone, subject to an appropriate minimum lot size), with lots ranging from 4,000sqm to 2ha.

The initial consultant's response to original submission dated 3 March 2019 largely agreed with the matters raised, but noted that *"Given the constraints in this precinct, there are other areas better suited to the delivery of large lot residential land"*.

The draft strategy identifies the following "*Key Constraints*" in Table 23:

- 1) Topography
- 2) Flood Prone Land
- 3) Watercourses

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*Submission to Draft Urban and Fringe Housing Strategy
515 Crookwell Road Kingsdale*

- 4) Sydney Drinking Water Catchment
- 5) Biodiversity
- 6) Strategic Agricultural Land
- 7) Existing and Potential Mineral Resource Areas
- 8) Bushfire
- 9) Cultural Heritage
- 10) European Heritage
- 11) Key Existing Land Use

In subsequent direct correspondence with Council officers¹, it was advised that the subject site "...was not prioritised for rural residential or urban as it is within the BSAL² area under SEPP Mining Petroleum and Extractive Industries, and within the Sooley catchment". The correspondence also raises the issue that the subject site is likely to have the future potential to be serviced by reticulated water and sewerage and therefore may possess future potential for conventional residential development. Therefore, so this logic goes, preference has been given (for large lot rural residential development) to areas where there is no potential in the foreseeable future for water and sewer services to be provided.

It is our considered view, as well as the view of the landowner, that the subject land should be included in the draft strategy for future rural residential development. In our view, the constraints to development identified above, whilst potentially complex, are manageable and responsibility to address the constraints would fall to the landowner. It would therefore not create an additional administrative burden for Council.

Indeed, there is no better opportunity in Goulburn than the subject site for large-lot rural-residential. The draft strategy maintains there are less constrained sites; however, fewer constraints does not necessarily mean a better location. The easy solution often is not the best, and there is no better example than this site. The time for consideration of the subject site is at this time for rezoning. Merely a single kilometre from the edge of Goulburn CBD, a property with a prescribed land value of \$1.56 million has no productive use. The Council must consider the objectives of local planning, which include:

- to promote the social and economic welfare of the community
- to promote the orderly and economic use and development of land,
- to promote the delivery and maintenance of affordable housing,

The principle objective of this current submission is to address the abovementioned constraints and other stated reasons why the subject land has not been included for future rural residential development by the revised draft strategy.

¹ Email from Kate Wooll to Jeff Bulfin dated 25 October 2019

² 'BSAL' is *Biophysical Strategic Agricultural Land*



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*Submission to Draft Urban and Fringe Housing Strategy
515 Crookwell Road Kingsdale*

Introduction

At this time, when Goulburn Mulwaree Council considers the evidence for the Urban and Fringe Housing Strategy, the Council must turn their mind to the inclusion of the subject site within the strategy.

It is our view that the subject site is a moderately constrained property, comprised of two large lots totalling about 165ha. The property is accessible by sealed roads and is situated only 1 kilometre from the edge of the existing Goulburn residential area.

The subject site has not been considered to the necessary degree by the draft strategy, which is a high-level investigation. By way of example:

Water and sewer

1. The draft strategy indicates the site may be able to be connected to water and sewer at some future time. However, there is no cost benefit analysis or technical review to determine whether such a claim is possible. It is obviously concerning to the landowner that if the subject land is sterilised from development by being excluded from the strategy, and further investigations reveal that the provision of reticulated water and sewerage services to the site are either financially or technically unviable, then he would be in a 'no win' situation. He would have foregone the opportunity for potential development now on the basis of an opinion in relation water and sewer that may not turn out to be possible. This would be a completely unreasonable and unjust outcome for this landowner.
2. The draft strategy does not consider whether the treatment plant would have the capacity to accommodate flows from the future development of the subject site. Indeed, there is some public benefit to allowing the subject site to be developed with onsite effluent disposal, as it allows any space capacity that may exist to be utilised for other sites, without potentially incurring further cost upgrading of the existing treatment facility.

Recently, a new sewer treatment facility was unveiled, with a capacity of 30,000 people (upgradeable to 40,000) at the cost of \$22 million. Before this, the last sewer plant completed constructed in 1918. The SA3 Goulburn Mulwaree Area records by 2016 Census a population of 35,559. The SSC of Goulburn marks 22,419. It is manifestly unreasonable to effectively sterilise the subject site until further upgrades to the sewer treatment facility allow development.

3. We agree that the issue of utilising onsite effluent disposal for large lots that drain toward Sooley Dam should be considered. However, this issue has



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515 Crookwell Road Kingsdale*

simply been raised, with no further investigation as to how it can be managed. Indeed, given the size of the subject land (around 165ha), the most efficient form of managing effluent would be on a holistic basis, rather than it being left to individual sites. Therefore, contrary to the “do nothing till later” approach taken in the draft strategy, now would be an ideal time to further investigate options for onsite effluent management. Current effluent disposal technologies exist where effluent can be treated to such a high degree it can be consumed by humans. It is an unnecessarily conservative position to take the view that the land should not be developed where onsite effluent is proposed, simply because the land drains to Sooley Dam.

4. If the land was to be used for *Intensive Plant Agriculture*, a land use permitted by the current E3 Environmental Management zone, a similar issue would exist in relation to nitrogen and phosphorus-laden runoff. Council would ensure through a DA process that a management strategy was in place to avoid this. We see little difference with the management of runoff of treated effluent.

Sterilisation of the subject land

5. The draft strategy suggests that the land should be retained with its current planning controls, that is, an E3 Environmental Management zone with a 100ha minimum lot size. Irrespective of the espoused justification for this, it leaves the landowner in a difficult position, not of his own making. Given the predicted take-up rates for development set out in the draft strategy, it may be more than 20-30 years before this land may be required for residential development.

The subject land is around 165ha, about one kilometre from the edge of the existing residential area of Goulburn, zoned E3 Environmental Management with a 100ha minimum lot size.

The Goulburn LEP 2009 Land Use Table sets out the following:

Zone E3 Environmental Management

1. Objectives of zone

- *To protect, manage and restore areas with special ecological, scientific, cultural or aesthetic values.*
- *To provide for a limited range of development that does not have an adverse effect on those values.*
- *To facilitate the management of water catchment areas, environmentally sensitive land and areas of high conservation value.*



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2. Permitted without consent

Environmental protection works; Extensive agriculture; Home occupations

3. Permitted with consent

Agriculture; Air strips; Animal boarding or training establishments; Camping grounds; Caravan parks; Centre-based child care facilities; Community facilities; Depots; Dwelling houses; Eco-tourist facilities; Emergency services facilities; Entertainment facilities; Environmental facilities; Farm buildings; Forestry; Home-based child care; Home businesses; Home industries; Information and education facilities; Oyster aquaculture; Pond-based aquaculture; Recreation areas; Recreation facilities (indoor); Recreation facilities (outdoor); Research stations; Roads; Rural workers' dwellings; Secondary dwellings; Signage; Stock and sale yards; Tank-based aquaculture; Tourist and visitor accommodation; Water recycling facilities

4. Prohibited

Industries; Intensive livestock agriculture; Multi dwelling housing; Residential flat buildings; Retail premises; Rural industries; Seniors housing; Service stations; Serviced apartments; Warehouse or distribution centres; Any other development not specified in item 2 or 3

Obviously, with the incentive of potential for being able to develop for residential purposes in 20-30 years time, the proponent is disincentivised to invest money in establishing the site for any financially viable use. This would result in the land being sterilised for several decades. Further, uses such as intensive plant agriculture have significant establishment and start-up costs and often take many years to turn a profit, so there is no incentive to pursue an agricultural purpose. There is insufficient land for a viable extensive agricultural use.

Sterilising the subject land in this manner is contrary to S.1.3(c) *Environmental Planning and Assessment Act*, which is "to promote the orderly and economic use and development of the land".

Consistency with *Environmental Planning & Assessment Act*

The *Environmental Planning and Assessment Act 1979*, the governing and prevailing legislation for planning in New South Wales outlines the objects of the Act at S.1.3:

Object Response



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515 Crookwell Road Kingsdale*

Object	Response
<i>(a) to promote the social and economic welfare of the community and a better environment by the proper management, development and conservation of the State's natural and other resources,</i>	The social and economic welfare of the community will be better advanced by permitting a type of development that is in demand in the area and which suits the culture of the Goulburn area. Conversely, the social and economic welfare of the community will be diminished by wedging this landowner into a situation where his land is sterilised from productive use, including loss of value
<i>(b) to facilitate ecologically sustainable development by integrating relevant economic, environmental and social considerations in decision-making about environmental planning and assessment,</i>	This submission sets out relevant economic considerations. Environmental and social considerations can be further explored in the future rezoning process
<i>(c) to promote the orderly and economic use and development of land,</i>	It is contrary to this aim to effectively sterilise the subject land from any productive use
<i>(d) to promote the delivery and maintenance of affordable housing,</i>	Increasing supply will press down on prices
<i>(e) to protect the environment, including the conservation of threatened and other species of native animals and plants, ecological communities and their habitats,</i>	These matters would be further investigated if the proposal is advanced
<i>(f) to promote the sustainable management of built and cultural heritage (including Aboriginal cultural heritage),</i>	These matters would be further investigated if the proposal is advanced
<i>(g) to promote good design and amenity of the built environment,</i>	A matter for future development considerations
<i>(h) to promote the proper construction and maintenance of buildings, including the protection of the health and safety of their occupants,</i>	N/A
<i>(i) to promote the sharing of the</i>	Noted



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*Submission to Draft Urban and Fringe Housing Strategy
515 Crookwell Road Kingsdale*

<i>Object</i>	<i>Response</i>
<i>responsibility for environmental planning and assessment between the different levels of government in the State,</i>	

TABLE 1 – Objects of EP&A Act

Demand and Supply

The Urban and Fringe Housing Strategy acknowledges that large-lot rural-residential housing is an integral component in housing variety. Without diversity in housing types, overly homogenous development will reduce the economic prosperity of Goulburn Mulwaree and ultimately flatline growth.

Large-lot rural-residential attracts, and more importantly, retains the high net worth members of the community. There is a tangible economic effect that bleeds into the community. High net-worth individuals are likely to own local investments, which provide jobs, growth and social agility to the community. If Goulburn Mulwaree Council is serious about the economic growth of the local economy and transitioning into a significant regional centre, the Council must consider the effect of the drastic undersupply of large-lot rural residential land.

Goulburn Mulwaree has grown naturally, and the Urban and Fringe Housing Strategy has made projections of future growth. However, the strategy fails to consider how this original growth occurred. The people of Goulburn Mulwaree are hard-working people; people who have jobs, have prospered from the fertility of the land and toil under the sun. However, to grow means to continue this hard work, which is not possible if there are no employers in the area.

Unlike some large commercialised employers, who may tend to opt for cheaper imported labour, local employers will not remain where they cannot live the lifestyle they have worked so hard to achieve. Without employers, there are no jobs, and without jobs, there is no growth. Goulburn Mulwaree risks flatlining their growth.

If a Council allows the provision of lifestyle housing, such as large-lot rural-residential, this promotes the growth of local firms through direct local investment. Direct investment attracts workers as employees, which in turn attracts secondary firms such as retail & cafes, creating an economic cycle of growth.

On the flip side, many hard-working people are not employers, and they need affordable housing. A central objective of the EPAA 1979 is to promote the creation of affordable housing (see table 1). Therefore, it is paramount the Council properly consider the implications of not including the subject site. Purely to increase the



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supply of housing will not stabilise house prices, nor lower it to the point where an average employee can afford to live.

Supply qualitatively requires consideration; the proposed increase in housing supply will attract and allow for Canberrans and other non-locals to become residents of Goulburn Mulwaree. This growth will inflate the local economy; however, if there are no jobs for the locals, there will be an increase in house price and rent without the financial support to elevate residents to a point by which they can afford to continue living in Goulburn CBD.

To ensure stable and affordable housing is to provide diversity, particularly at the upper pricing bracket. Provision of this nature enables those who earn a more significant amount of money to coexist with the existing housing supply. Further, as a multiplier effect, removing this contingent of residents from competing with existing residents will foster a more equally distributed affordability such that all locals of Goulburn Mulwaree can have a fair go at home ownership.

In the housing market, supply can often create increased demand. People are attracted to areas where there is a wide choice. Artificially narrowing choice by restricting supply can have the effect of dampening demand. If Council permits the subject site to be included in the strategy for large lot rural residential development, it would increase the range of housing choices available and this can have an exponential effect on demand.

Finally, the arbiter of the optimum level of supply is market-driven and an argument exists that governments should not intervene in market forces. If a developer believes that he/she can profit from a development, then this may entice him/her to proceed. If the demand is not there, the developer is not likely to proceed. However, either way, the decision should rest with the developer, rather than artificial intervention in the property market by Council.

Productive Agricultural Land

The Urban and Fringe Housing Strategy suggests the subject site is mapped and constrained as "productive agricultural land". No doubt this reference may be attributed to part of the subject land being identified as *Biophysical Strategic Agricultural Land* ('**BSAL**') on Map Sheet 034 *State Environmental Planning Policy (Mining, Petroleum Production and Extractive Industries) 2007* ('**Mining SEPP**').

The definition of BSAL contained in the Mining SEPP is not helpful for the present discussion. For present purposes it is sufficient to understand that it refers to land considered to be high quality agricultural land. Its purpose is to create a Gateway process for any State significant mining or coal seam gas proposal on land where BSAL has been identified. The Gateway assessment is undertaken by an



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independent panel of scientific experts before a DA can be lodged, specifically looking at land and water impacts.

We refer to the NSW Government's publication *Frequently Asked Questions – Biophysical strategic agricultural land mapping across NSW* dated January 2014. This document outlines how the BSAL land was identified:

- Agricultural land across the state was assessed against specific scientific criteria – levels of soil fertility, land and soil capability classes and access to reliable water and rainfall levels;
- The assessment was conducted in consultation with key industry representatives and industry experts;
- As this land is mapped at a broad regional scale, there may be circumstances in which the maps do not fully reflect the existence of BSAL on the ground;
- A site verification process has been introduced to confirm whether a specific site does, in fact, contain BSAL, before proceeding through the Gateway process;
- It is the inherent values of the land itself, rather than the agricultural activity it supports, which determine the BSAL classification;
- A protocol for site verification has been developed and is available and the NSW DPIE website

We make the following comments:

- The area mapped as BSAL represents only about 20% of the total area of the site;
- As noted above, the mapping was undertaken at a broad regional scale and may not reflect the reality. In this regard, a site verification process should be undertaken to validate or invalidate the BSAL classification. Such a validation process is a legitimate task for the rezoning process and should not exclude this land from inclusion in the final strategy;
- The purpose of the BSAL mapping was not related to, nor intended to be used for, determining future large lot rural residential development outcomes. Its purpose was to provide some level of protection to homes and agricultural land from the impacts of mining and coal seam gas activity;
- Liaising with the relevant government agencies is a normal part of a rezoning process. This should not preclude this land from inclusion in the final strategy
- Whilst it is noted that it is the inherent values of the land itself that determines the BSAL classification, in reality there are many constraints to utilising the land for a productive and financially viable agricultural use. The permissibility issue has already been mentioned in this submission, where intensive livestock agriculture, for example, is prohibited in the E3 Environmental Management zone. Extensive agriculture is permitted without consent, but is likely not enough land area to be financially viable in the long term. Intensive plant agriculture appears to be permissible, but has significant set up costs. A



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landowner would not want to invest significant money into a set up when ultimately he will be able to develop for large lot residential purposes. Lastly, if the land were to be put to an agricultural use and surrounding land is developed for housing, it is likely to result in some form of rural land use conflict

It is our view that Council should not preclude the subject land from inclusion in the study based in part on having to address BSAL issue. Indeed, ground-truthing and verification may reveal that the land does not qualify for BSAL classification. This will only be determined if Council allows the land to be included.

Proximity to Lake Sooley

It has been noted that the subject land contains several watercourses which drain directly into Lake Sooley and therefore onsite effluent disposal may create risk of contamination. We respond as follows:

Notwithstanding the large lot residential zoning, there is always the option during rezoning to investigate and consider connecting the site to the reticulated sewerage system. Whilst we have not undertaken any investigations in this regard, it should, as a matter of course, be considered during the rezoning process as an option, if for no other reason to discount it.

The current permissible uses include intensive plant agriculture. Most market gardens and the like use pesticides, herbicides and fertilisers to assist and promote growth. Therefore, any redevelopment of the subject site will have to demonstrate a neutral or beneficial effect on water quality of receiving streams.

We consider this is a matter to be investigated during the rezoning process, rather than used as a justification for exclusion. Options could be investigated to determine the most appropriate method to manage the effluent.

Other potential constraints

Ecology

Whilst site-specific investigations would be carried out during a rezoning process, it is noted that the subject land is not shown as being affected on the GMLEP 2009 – Terrestrial Biodiversity Map.

Aboriginal archaeology

Whilst site-specific investigations would be carried out during the rezoning process, there are no items of Cultural Heritage or Aboriginal Significance within proximity of the subject site.



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Bushfire risk

The subject site is designated as "Bushfire Prone Land", specifically, vegetation category 3. "Vegetation Category 3 is considered to be medium bushfire risk vegetation. Any future development of the land (or rezoning) would involve input from Rural Fire Service and general compliance with Planning for Bushfire Publication and relevant Australian Standards.

Significant areas of the Goulburn Mulwaree region are bushfire prone. However, this is not a valid ground for blanket rejecting a site. Rather, it is a trigger for further and more site-specific assessment considering the use of Asset Protection Zones (APZ) and mitigation methods.

Water supply

The subject site has relative proximity to the water supply on the northern and southern ends of Crookwell Road. There appears to be precedent by the Council in extending water supply, even where immediate commercial viability is unclear. (Range Road and Middle Arm Road, for example). Provisioning of this nature, so long as it is consistent, indicates a forward-thinking, long term Council attitude.

Flooding

The rezoning process would investigate any local or regional flooding at the site.

Conclusion

In conclusion, as Council considers the evidence for the Urban and Fringe Housing Strategy, we request Council turn their mind to the inclusion of the subject site within the strategy, for future large lot rural residential development. Our previous submissions have identified the opportunity for a range of lot sizes, from 4,000sqm, 1ha and 2ha.

The subject site is a very moderately constrained property, comprised of two large lots. The property is accessible by sealed roads and is situated only 1 kilometre from Goulburn CBD.

The subject site has not been considered by the strategy to the necessary degree to determine whether or not it should be rezoned. The strategy has overlooked the subject site, instead favouring other areas where at a high level there appears to be less constraints. However, the objective of this submission is simply to allow the appropriate rezoning analysis and process to take its course, by including it in the strategy and identifying it as worthy of further investigation and potential rezoning.

The subject site is in a state of paralysis and at serious risk of sterilisation, requiring logical and proactive intervention by Council. For various reasons, the site is incompatible with a number of agricultural uses. The landowner, like all Goulburn



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Mulwaree residents, is seeking a fair go. The subject site is well suited to large-lot rural-residential.

On the natural fringe, the subject site would provide an invaluable transition from residential to primary production. Development of this nature not only serves as a logical and orderly process, but it also provides a critical housing variety and fosters affordable housing - meeting the objectives of the Environmental Planning and Assessment Act 1979.

The physical properties of the subject site such as topography, biodiversity, bushfire hazard, flooding, and heritage all suggest that large-lot rural-residential is not only appropriate, but it is the best form of development concerning community benefit.

Large-lot rural-residential attracts, and more importantly, retains the high net worth members of the community. There is a tangible economic effect that filters into the community. High net-worth individuals are likely to own local investments, which provide jobs, growth and social agility to the community. If Goulburn Mulwaree Council is serious about the economic growth of the local economy and transitioning into a significant regional centre, the Council must consider the effect of the undersupply of broad and diverse housing choice, of which large-lot rural residential lots are an essential and in-demand component.

If a Council allows the provision of lifestyle housing, such as large-lot rural-residential, this promotes the growth of local firms through direct local investment. Direct investment attracts workers as employees, which in turn attracts secondary firms such as retail and cafes, creating an economic cycle of growth.

On the merits outlined, it is requested that the Council intervene and modify the Urban and Fringe Housing Strategy to include 515, Crookwell Road, Kingsdale for fringe housing particularly supporting large-lot rural-residential on the site.

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SCANNED**KINGSDALE CONSULTING PTY LTD**

ABN 12 148 887 647

ACN 148 887 647

P O Box 539

GOULBURN NSW 2580

Tel: 0428 483 558

Email: robansue@bigpond.net.au

The General Manager
Goulburn Mulwaree Council
Locked Bag 22
GOULBURN NSW 2580

Attention: Kate Wooll

**Re: Goulburn Mulwaree Draft Urban and Fringe Housing Strategy
Lot 4 DP 1163244 – 16 Nicole Place, Goulburn.**

Dear Kate,

I refer to the Goulburn Mulwaree Draft Urban and Fringe Housing Strategy currently on public exhibition and act under the instruction of the owner of the above land to make this submission to Council in support for the inclusion of the subject land and adjacent land to have a minimum lot size of 2,000m² for residential development.

The land is currently zoned E4 Environmental Living having a minimum lot size of 8,000m².

The Strategy identifies the subject land with the Garfield precinct and states:

The Garfield precinct is located on the 'other side' of the ridge, and approximately 3km from the city centre, bounded by the Hume Highway in the south, Main Southern Railway line in the east and Addison Street in the north. Garfield is the main entrance to Goulburn from the south along Hume Street (including the Big Merino landmark).

The precinct has a strongly suburban character that is very different from Goulburn's other urban precincts in terms of building size (workers' housing), simplicity (little detailing) and modesty of materials (many timber dwellings and some fibro cement dwellings with metal roofs, with comparatively few in brick).

There is a variety of architectural and period styles across the precinct, indicating a collection of individual dwellings built up over time. Infill development is introducing different size, form and materials in dwelling design to the Garfield precinct. (Page 132)

These comments do not reflect the existing housing characteristics in Nicole Place nor the area located between Carr Street and Cathart Street south of Mary Street. This area is more akin to large lot residential development with high quality housing and not "many timber and some fibro cement dwellings with metal roofs, with comparatively few in brick."

The Strategy also includes the following recommendations in respect to the Garfield precinct:

- *Some large vacant/undeveloped parcels of land available for infill urban residential; also, depending on servicing, some lots could be rezoned and subdivided in future.*
- *Re-zone opportunity area which borders Central Goulburn to R3 Medium Density Residential.*

The recommendation that “Some large vacant/undeveloped parcels of land available for infill urban residential; also, depending on servicing, some lots could be rezoned and subdivided in future” is supported and the subject land is perfectly placed to accommodate additional residential development as it is currently fully serviced.

The land is currently zoned E4 Environmental Living with the following objectives and land uses:

Zone E4 Environmental Living

1 Objectives of zone

- To provide for low-impact residential development in areas with special ecological, scientific or aesthetic values.
- To ensure that residential development does not have an adverse effect on those values.
- To avoid or minimise impacts on the natural environment and to protect environmentally sensitive land.

2 Permitted without consent

Home occupations; Roads

3 Permitted with consent

Building identification signs; Camping grounds; Cellar door premises; Community facilities; Depots; Dwelling houses; Eco-tourist facilities; Environmental facilities; Environmental protection works; Extensive agriculture; Farm buildings; Forestry; Home-based child care; Home businesses; Home industries; Information and education facilities; Kiosks; Recreation areas; Roadside stalls; Secondary dwellings; Tourist and visitor accommodation; Water recycling facilities

4 Prohibited

Hotel or motel accommodation; Industries; Service stations; Serviced apartments; Warehouse or distribution centres; Any other development not specified in item 2 or 3

Dwelling houses are permissible in this zone.

In respect to the objectives of the E4 Environmental Living Zone, the following comments are provided:

- To provide for low-impact residential development in areas with special ecological, scientific or aesthetic values.

Comment: There are existing residences within the E4 zone which is low-impact residential development with associated landscaping. The area does not possess special ecological or scientific values as it is not identified on the GLEP 2009 Terrestrial Biodiversity Map as shown below on page 9. The site is substantially cleared of vegetation generally except for exotic species planted around the existing dwellings.

- To ensure that residential development does not have an adverse effect on those values.

Comment: The existing residences incorporate associated landscaping which enhances the ecological, scientific or aesthetic values of the site and locality.

- To avoid or minimise impacts on the natural environment and to protect environmentally sensitive land.

Comment: The existing development on the site does not impact on the natural environment and the site is not environmentally sensitive as it is not identified on the GLEP 2009 Terrestrial Biodiversity Map as shown below on page 9.

Biodiversity issues in respect to the subject land have been examined by Woodlands Environmental Management and a copy of the report is attached which concludes:

- *The pre-1750 vegetation and habitats 4000m² subject site have been significantly structurally and floristically modified as a consequence of historic clearing, grazing and the introduction of exotic weeds.*
- *The subject site may be classified as 'highly disturbed areas with no or limited native vegetation' and is of low biodiversity value.*
- *Rezoning or future development of the subject site is unlikely to have a significant impact on biodiversity values within the locality.*

Flora

- *Remnant overstorey on the subject site is limited to a single immature Blakely's Red Gum Eucalyptus blakleyi.*
- *No native mid-stratum is present.*
- *The groundcover is dominated by exotic species and does not meet the definition of 'native vegetation' i.e. >50% cover.*
- *No threatened ecological communities are present.*
- *No threatened species of flora was located by the survey, and it is considered unlikely that any would be present due to the degradation of the vegetation.*
- *The Grassy Woodland vegetation within land west of Carr Street could potentially be classified as White Box Yellow Box Blakely's Red Gum Woodland. Additional surveys would be required to confirm the type and condition of vegetation within this area.*

Fauna

- *The subject site lacks significant nesting, breeding and foraging habitats as a consequence of historic clearing, grazing and the introduction of exotic weeds.*
- *Three threatened species of fauna (Spotted Harrier Circus assimilis, Little Eagle Hieraaetus morphnoides and Diamond Firetail Stagonopleura guttata) could potentially utilise the habitat within the subject site for foraging.*

The report includes the following statement regarding the E4 zoned land located to the north of Lot 4 DP 1163244:

The E4 Zone of the three adjoining lots north of the subject site (Lot 151 DP 1037013, Lot 1 DP 1232721 and Lot 3 DP 238639) (refer Figure 4: Adjoining lots with E4 zoning) all include dwellings and the curtilage modified to a greater or lesser extent for domestic gardens, landscaping etc. These would be classified as either 'highly disturbed areas with no or limited native vegetation' or 'highly modified Grassy Woodland' and classified as low biodiversity value. The c. 1.5ha E4 zone of the two lots at the northern end of Carr Street (Lots 1 & 2 DP 238639) do include residential development are similar to the vegetation west of Carr Street. The limited and constrained survey of vegetation and habitats within this area indicates that the Grassy Woodland present could potentially be classified as White Box Yellow Box Blakely's Red Gum Woodland, listed as an Endangered Ecological Community under the NSW Biodiversity Conservation Act 2016 and a Critically Endangered Ecological Community under the Commonwealth Environment Protection and Biodiversity Conservation Act 1999. Surveys using appropriate methodologies would be required to confirm the type and condition of vegetation within this area. (Page 4)

The land, therefore, does not contain significant environmental constraints to future subdivision and development.

The land is also identified in the Goulburn Mulwaree Strategy 2020 prepared by Parsons Brinckerhoff as part of growth area mapping (page 22) – see copy of the map below at page 11. This mapping identifies the subject area as being suitable for a 2000m² minimum lot size.

The following information is also included:

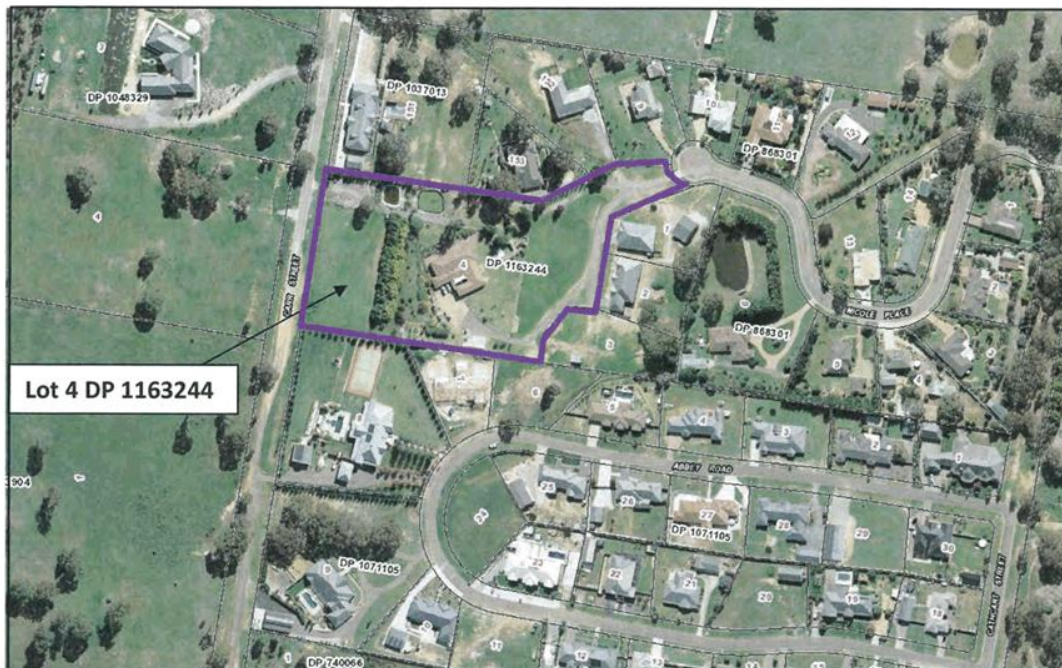
▪ Aerial Photograph – Lot 4 DP 1163244 Zone and Lot Size Boundary	Page 5
▪ Subdivision Layout - Lot 4 DP 1163244	Page 6
▪ Carr Street Photographs	Page 6
▪ Existing Minimum Lot Size Map	Page 7
▪ Proposed Minimum Lot Size Map	Page 8
▪ Terrestrial Biodiversity Map	Page 9
▪ Locality aerial photograph indicating existing dwellings and E4 Zone and Proposed 2000m ² Minimum Lot Size Area	Page 10
▪ Goulburn Mulwaree Strategy 2020 Growth Areas	Page 11

In summary, it is submitted that in respect to the land proposed for a 2000m² minimum lot size, residential development complies with the objectives of the E4 Environmental Living zone and all services are existing and available to the land. Previous submissions have also been made in respect to this land on the 6 September 2016 and 19 February 2019.

If you require any additional information or clarification, please contact me on 0428 483 558 or at robert@laterals.com.au.

Yours sincerely

Robert Mowle
KINGSDALE CONSULTING PTY LTD
10 December 2019

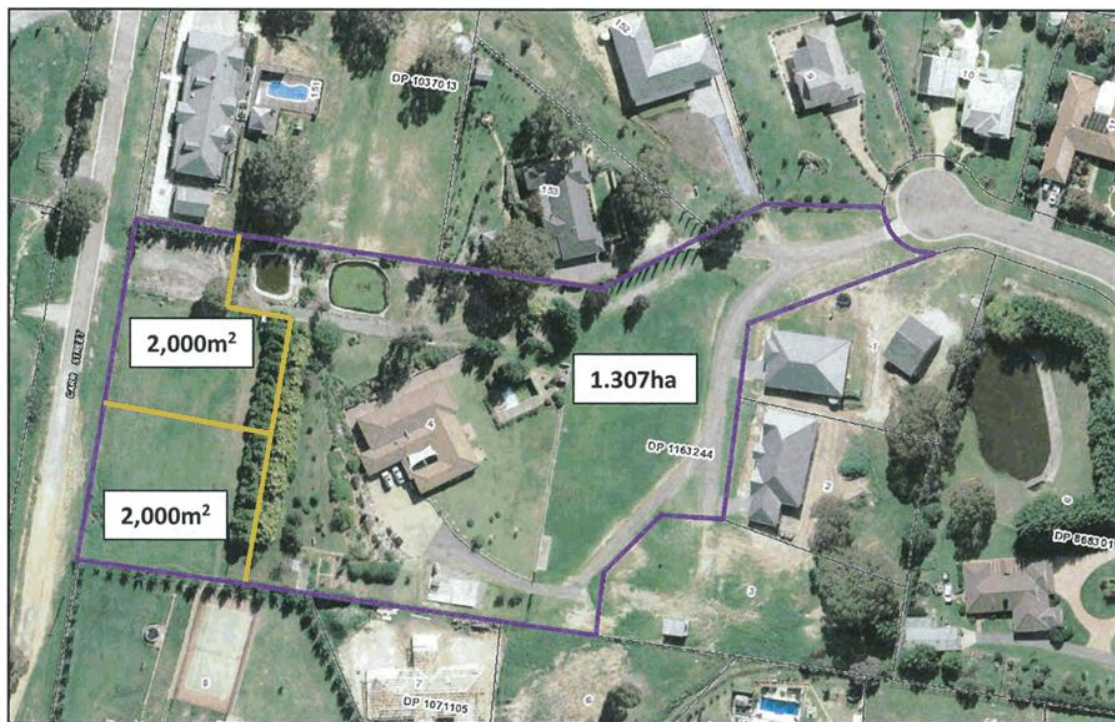


Lot 4 DP 1163244



Zone and Lot Size
Boundary

Aerial Photograph – Lot 4 DP 1163244
(Map Source: Six Maps)



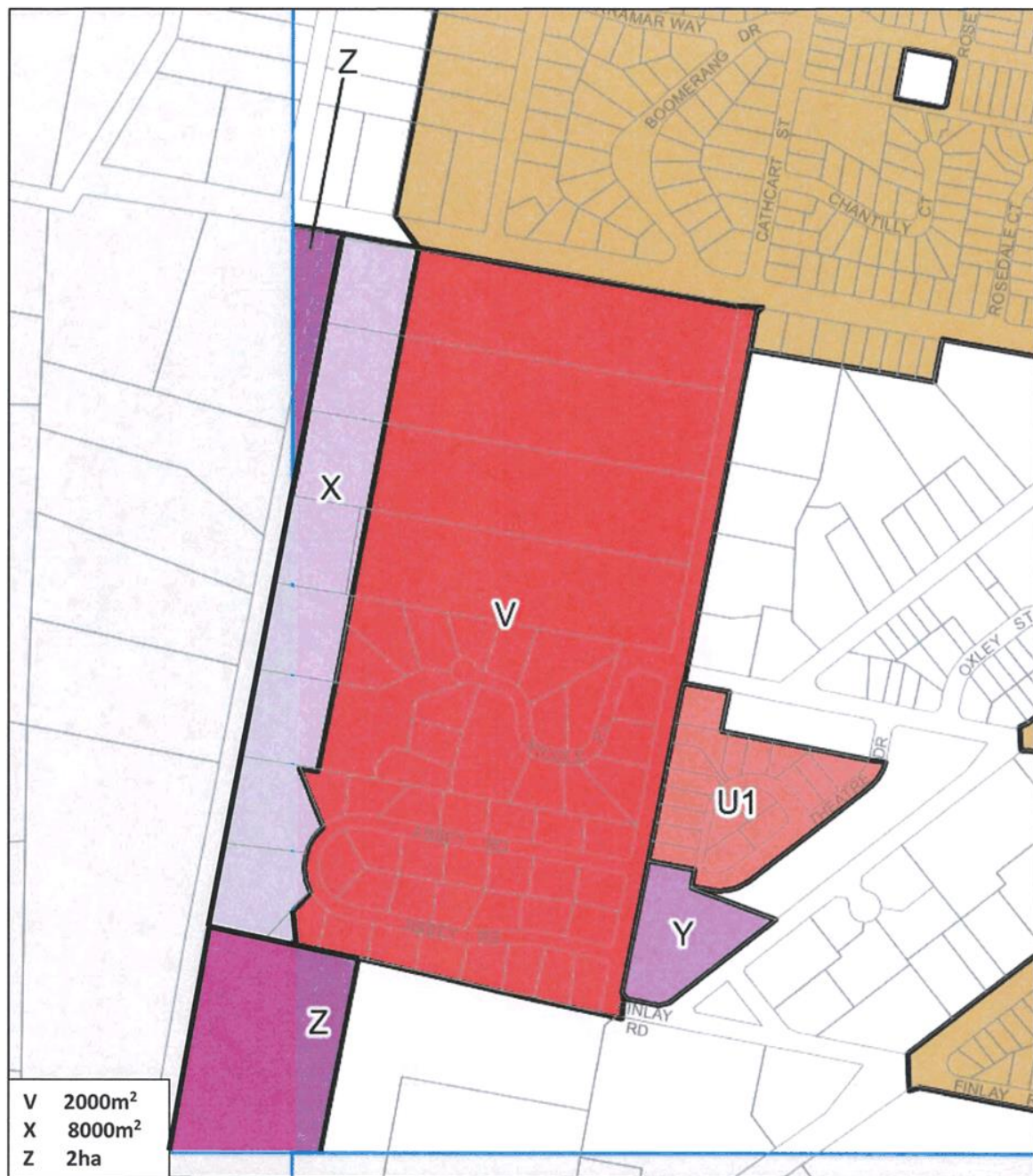
Lot 4 DP 1163244 – Subdivision Layout
(Map Source: Six Maps)



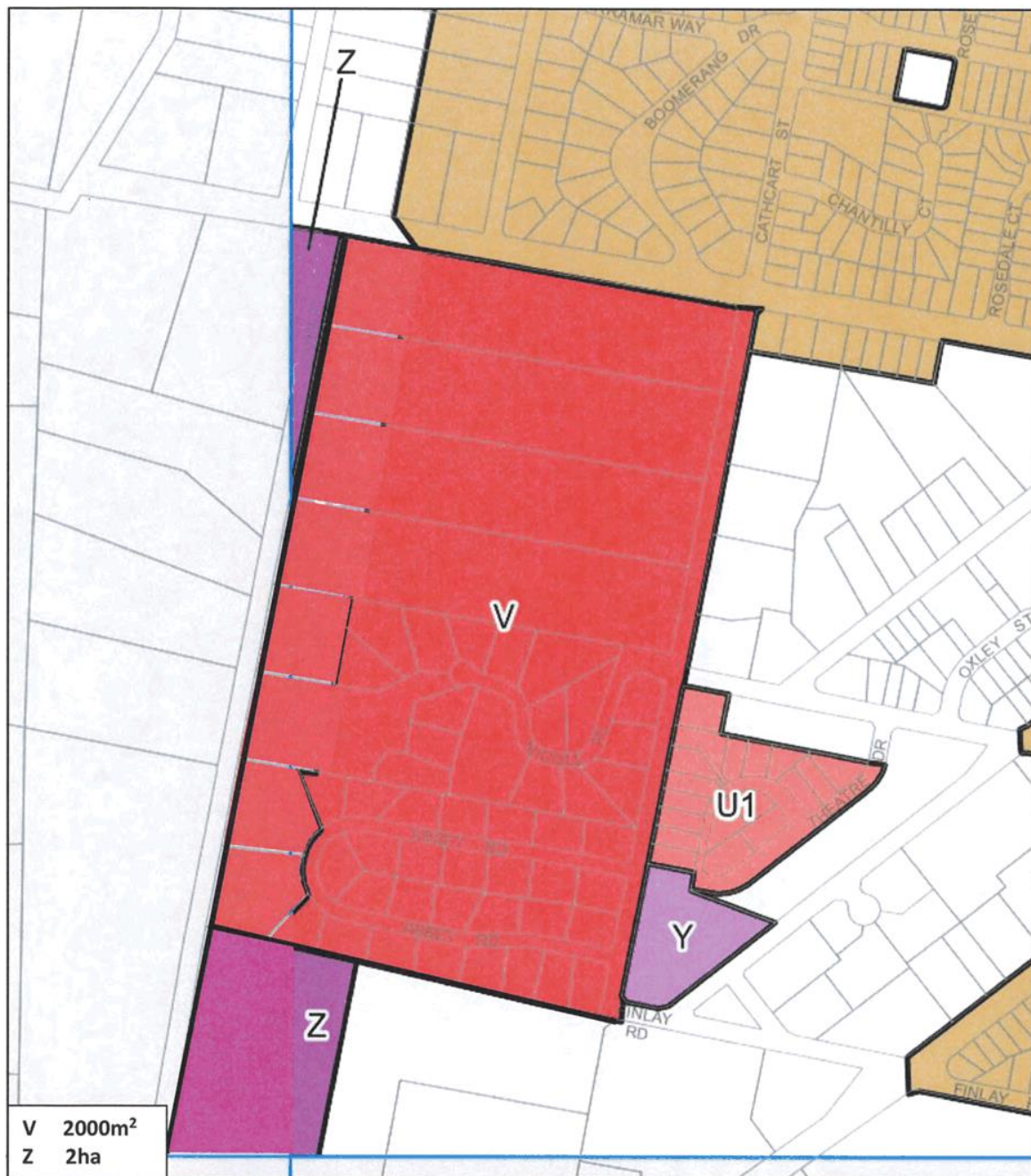
Carr Street – View North



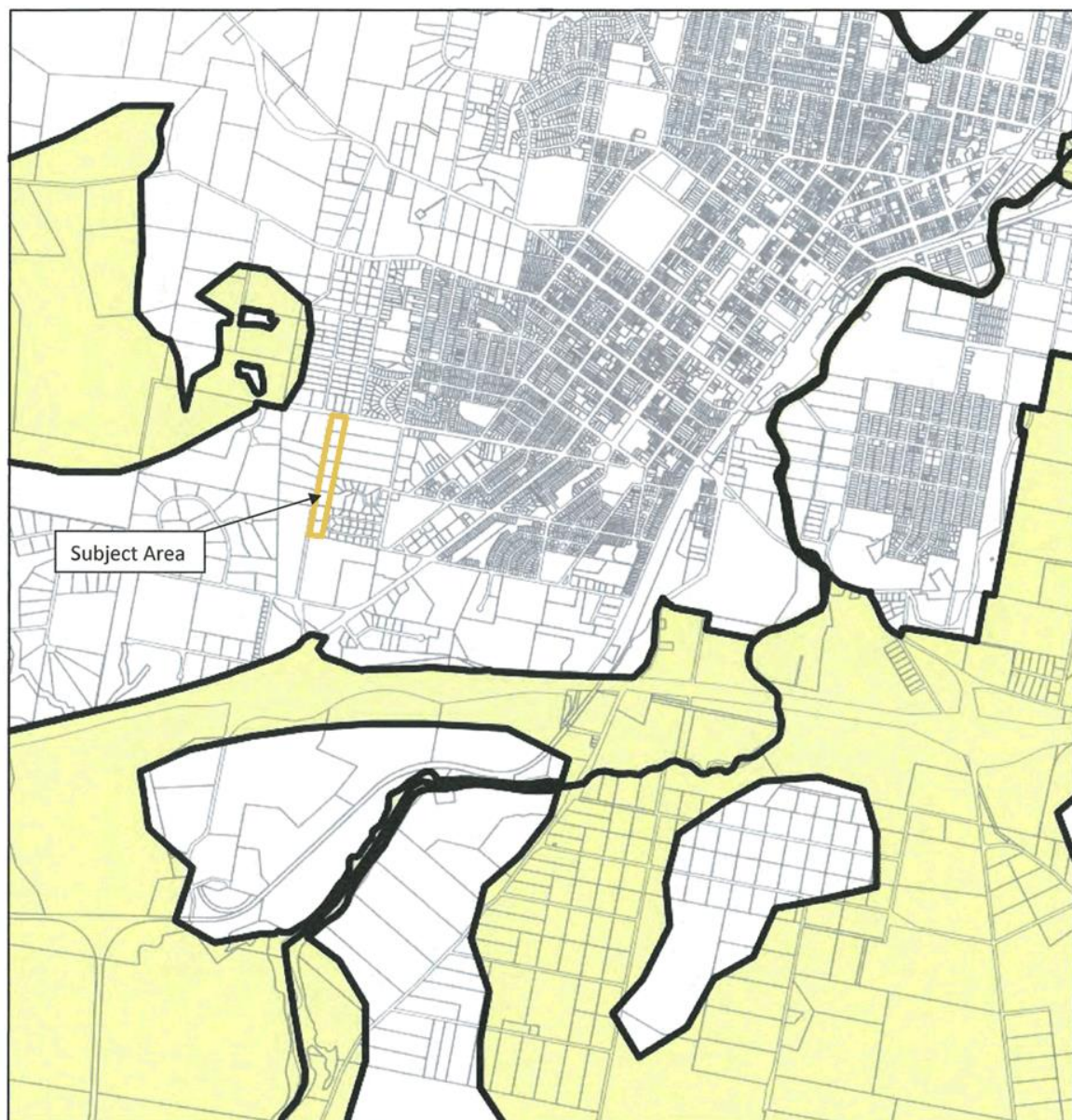
Carr Street – View South



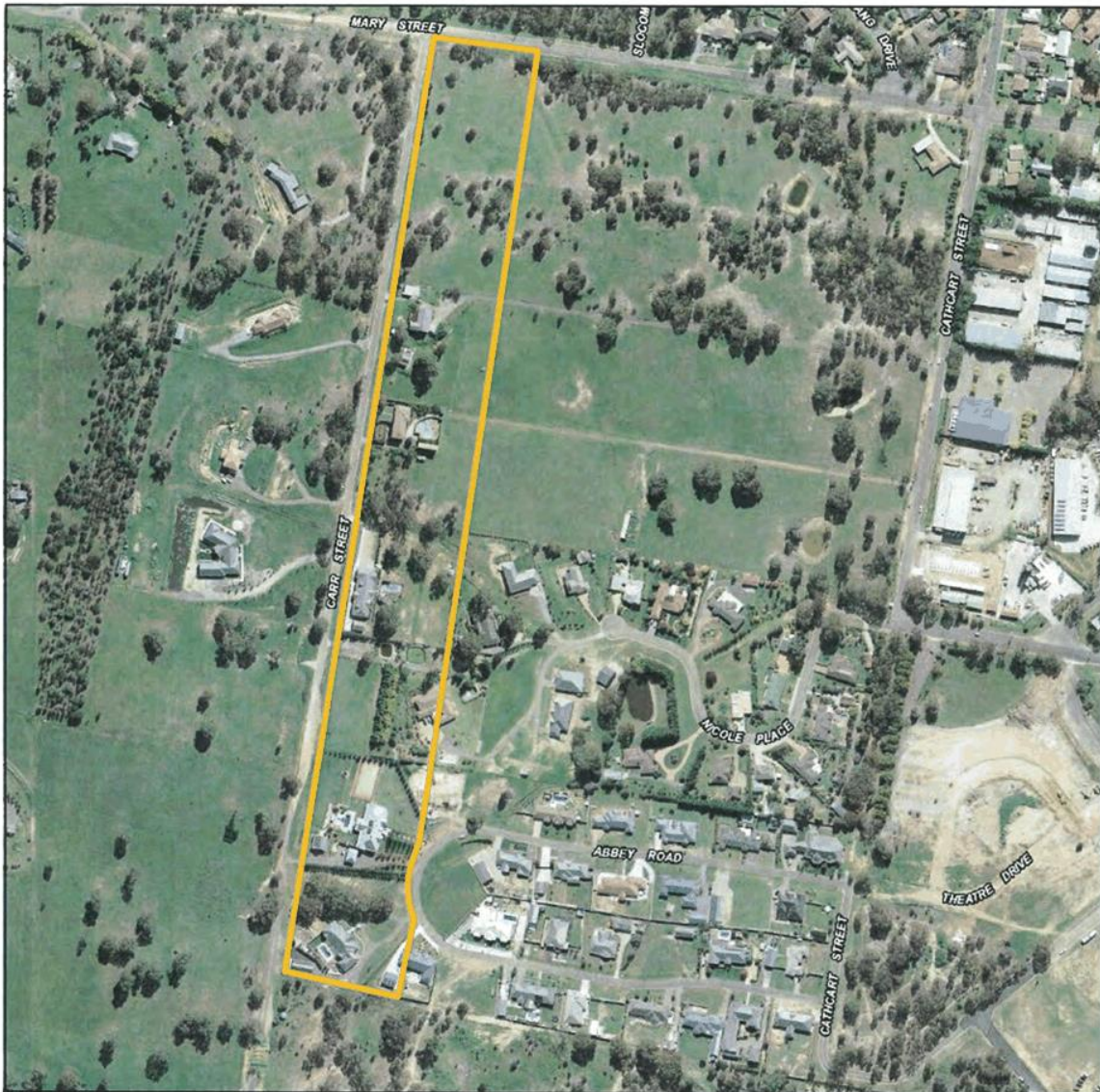
Existing Minimum Lot Size Map
(Map Source: NSW Legislation website)



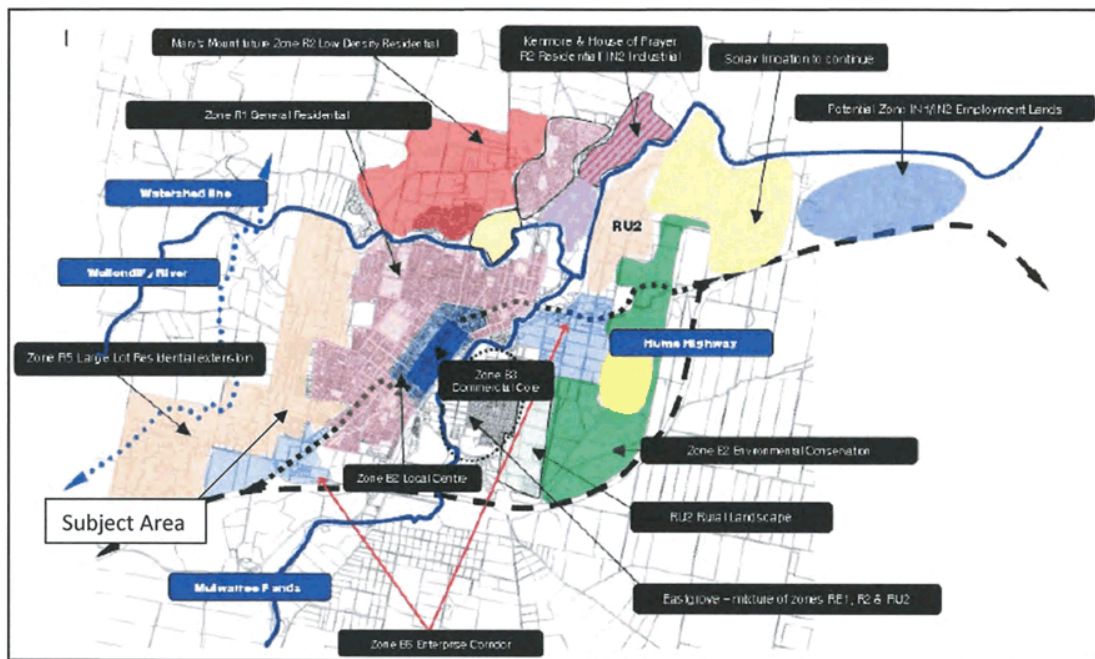
Proposed Minimum Lot Size Map
(Map Source: NSW Legislation website)



Terrestrial Biodiversity Map
(Map Source: NSW Legislation website)



Aerial Photograph – Existing Dwellings, E4 Zone and Proposed 2000m² Minimum Lot Size Area
(Map Source: Six Maps)



GOULBURN MULWAREE STRATEGY 2020 GROWTH AREAS
(Map Source: Goulburn Mulwaree Strategy 2020)

HOUSING POLICY SUBMISSION

Goulburn Heritage Group members wish to congratulate *elton consulting* for a highly detailed survey of land use opportunities around Goulburn - and hope that this provides vision for this city's prosperous growth and development.

Our comments below are restricted to Precinct 18, the Goulburn Heritage Conservation Area, where medium density residential expansion needs to be encouraged.

Within Precinct 18, urban redevelopment is suggested for 26 ha. around Lagoon Street - and for 19 ha. to the south, an area somewhat restricted by flooding possibilities. While we fully support medium density infill housing in both locations, any increases in population numbers close to the CBD will also require increases in community recreational spaces that presumably would make good use of flood prone spaces.

GHG members would like GMC to note the following items, that:

- * while encouraging medium density growth, we do not support the building of tightly crammed villa units - but recommend two-storey terrace town housing, each with private party walling and garden frontages, ideally orientated to suit sun and wind directions;

- * we do not see built heritage as a redevelopment constraint but rather as a setter of quality design standards to match surrounding housing and garden characteristics;

- * perhaps a clarification of the terms R3 and a new R2 is needed where Council's DCP controls should stipulate desirable streetscape standards for each zone;

- * while strongly supporting the growth of smaller, more affordable residential units for single people and the elderly in accordance with future population forecasts, these still need to be of high quality design standards, including balconies and garden spaces, that upkeep the city's very attractive environmental streetscape qualities;

- * we do not support Council's moves to opt out of providing reasonable development guidelines by allowing private developers to offer cheap building proposals on a site by site basis - it still remains GMC's responsibility to ensure that all medium density infill proposals upkeep this city's much admired and appreciated built heritage characteristics;

- * with CBD retail business in serious decline, this land use survey offers a great opportunity to reinvigorate central Goulburn by encouraging more people to live in shop top housing and nearby suitable apartment units - this is an aspect completely lacking in the *elton consulting* Precinct 18 land use survey, one that would cater very well for changing population needs, liven up the use of public spaces within walking distance of the city's main business area and thereby greatly assist commercial growth where it is sorely needed.

Goulburn Heritage Group members congratulate GMC on this venture and wish it a highly successful and productive outcome.

Quarry Developments inc. Craig's Hill

A.B.N. 47 905 190 707

*Partners:**Jeanette Shuttle**John W. Craig***54 Cathcart Street****Goulburn NSW 2580**

Re Draft Urban and Fringe Housing Strategy Goulburn and Marulan.

**Shown as Marys Mount (Progress Street and Middle Arm Road) and
Craigs Hill – Goulburn North (Middle Arm Road) shown as Sites 14 and 24 on In Site
Assessment- Opportunity Sites 17/12/18**

The General Manager

Email: Submissions@goulburn.nsw.gov.au

Dear Sir,

With reference to the report from Elton Consulting re above we would like to make the following submission as owners of the above properties.

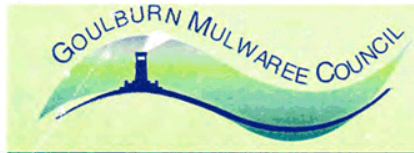
1. Site 14 (Lot 8 Progress Street) has a DA approval 452/0405/DA for 93 lot Subdivision this has an acknowledgment dated 21 August 2008 that the DA approval will not lapse ,a copy is attached , the report needs to be updated to reflect these details. The lot size varies and are under 700 m2. The land area is 7.557 ha .

2. Site 24 is shown as 52.46ha though this incorporates Lot 12 which is 2.502ha and also the E3 Env Management which is approximately 19.8ha. A submission is attached which was submitted to Goulburn Mulwaree Council in 2011 on behalf of Flora Jean Craig (Deceased) by Southern Cross Consulting Surveyors and we wish to have this reassessed as a new submission for the Strategy Plan inclusion. A large section of the E3 zone could be 700 m2 blocks and or minimum lot size of 4 hectares.

We remain

Yours faithfully

John Craig and Jeanette Shuttle
T/As Quarry Developments/Craigs Hill



Civic Centre 184-194 Bourke Street Goulburn NSW
Telephone: (02) 4823 4444 • Facsimile: (02) 4823 4456 • www.goulburn.nsw.gov.au
Correspondence to: Goulburn Mulwaree Council Locked Bag 22 Goulburn NSW 2580

Contact: Development Control
Reference: DA/452/0405

21 August 2008

Southern Cross Consulting Surveyors
PO Box 142
GOULBURN NSW 2580

Dear Gilbert

**Subject: 17 Progress Street, Goulburn
DA/452/0405
Your Reference: 21333**

Further to your letter dated 13 August 2008 please be advised that in accordance with Section 95(4) that work has physically commenced on the land by proof of survey & therefore the consent will not lapse.

For any further information please don't hesitate to contact the undersigned.

Yours faithfully

Dianne James
SENIOR TOWN PLANNER



20 Clifford Street
PO Box 142
Goulburn NSW 2580

T: 02 4822 1366
F: 02 4822 1365
E: admin@sccssurveyors.com.au

Your Ref:

Our Ref: 22107

12 September 2011

The General Manager
Goulburn Mulwaree Council
Civic Centre
Bourke Street
GOULBURN. NSW. 2580.

Dear Sir,

Re: Local Environmental Plan (LEP) Review
Site Address: Middle Arm Road and Progress Street, Goulburn
Title Details: Lots 11 & 12 DP1156095

We advise that we act for Mrs Flora Jean Craig, owner of the subject land parcels. We have been instructed to prepare the following submission concerning the subject land for consideration in the review of the Goulburn Mulwaree local environmental plan (LEP).

PROPOSED SITE.

The development site referred to in this submission is part of the land shown in Lots 11 & 12 DP1156095. The purpose of this submission is to seek a change in the minimum lot size for the erection of a dwelling within that part of the site zoned as E3 from 100 hectares to an area which is reflective upon the site attributes.

CURRENT & PROPOSED ZONING

Under the provisions of the current LEP the lands are zoned R2 Residential and *Environmental Management (E3)* with a minimum lot size of 100 hectares. It is that part of the site which is zoned Environment Management (E3) which is subject to this submission. The aims of the E3 zone are:

- to protect, manage and restore areas with special ecological, scientific, cultural or aesthetic values;
- to provide for a limited range of development that does not have an adverse effect on these values; and
- to facilitate the management of water catchment areas, environmentally sensitive land and areas of high conservation value.

Consultants in Surveying, Planning, Mining, Mapping, Engineering and Project Management

In particular it is noted that dwelling approval is permitted with consent.

The LEP on exhibition does not propose that any changes are to be made to the zoning of the subject site.

PROPOSED ZONING AMENDMENT.

Our client proposes that an amendment to the LEP in that the minimum lot size for the erection of a dwelling with the E3 zoning on the subject land is reviewed to represent the land capability as referred to in the *Detailed Slope Stability Investigation* (DSSI) prepared by Coffey & Partners Pty Limited (copy attached under separate cover).

We have prepared a plan (attached herewith) which reflects the site slope suitability (refer DSSI) in relation to zone boundaries. In particular your attention is drawn to the plan and the following:

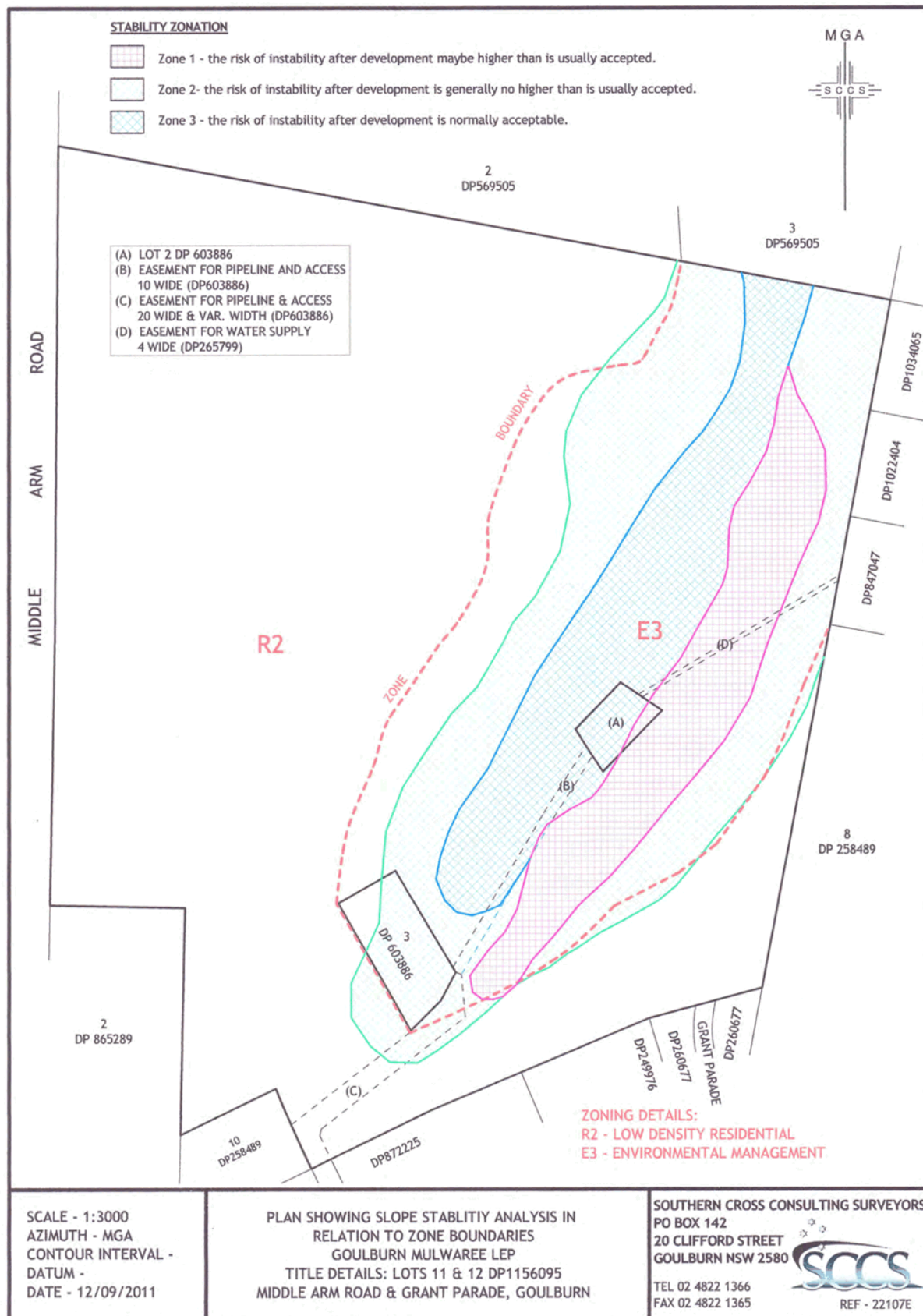
- an area of about 3.8 hectares within the E3 zone has been identified in the DSSI as being unsuitable for dwelling development (Zone 1 on the plan). As a result no dwelling approval is sought within this constrained area.
- the remaining section of land of about 16 hectares within the E3 zoning has been identified as being "usually acceptable" or "normally acceptable" (refer DSSI) for development purposes (Zones 2 and 3 on plan). The site is surrounded to the east, south and west by land that has been zoned as *Low Density Residential (R2)* with minimum lot sizes of 700m². In this respect it is submitted that the 100 hectare lot minimum size for E3 lands for the erection of a dwelling is inappropriate.

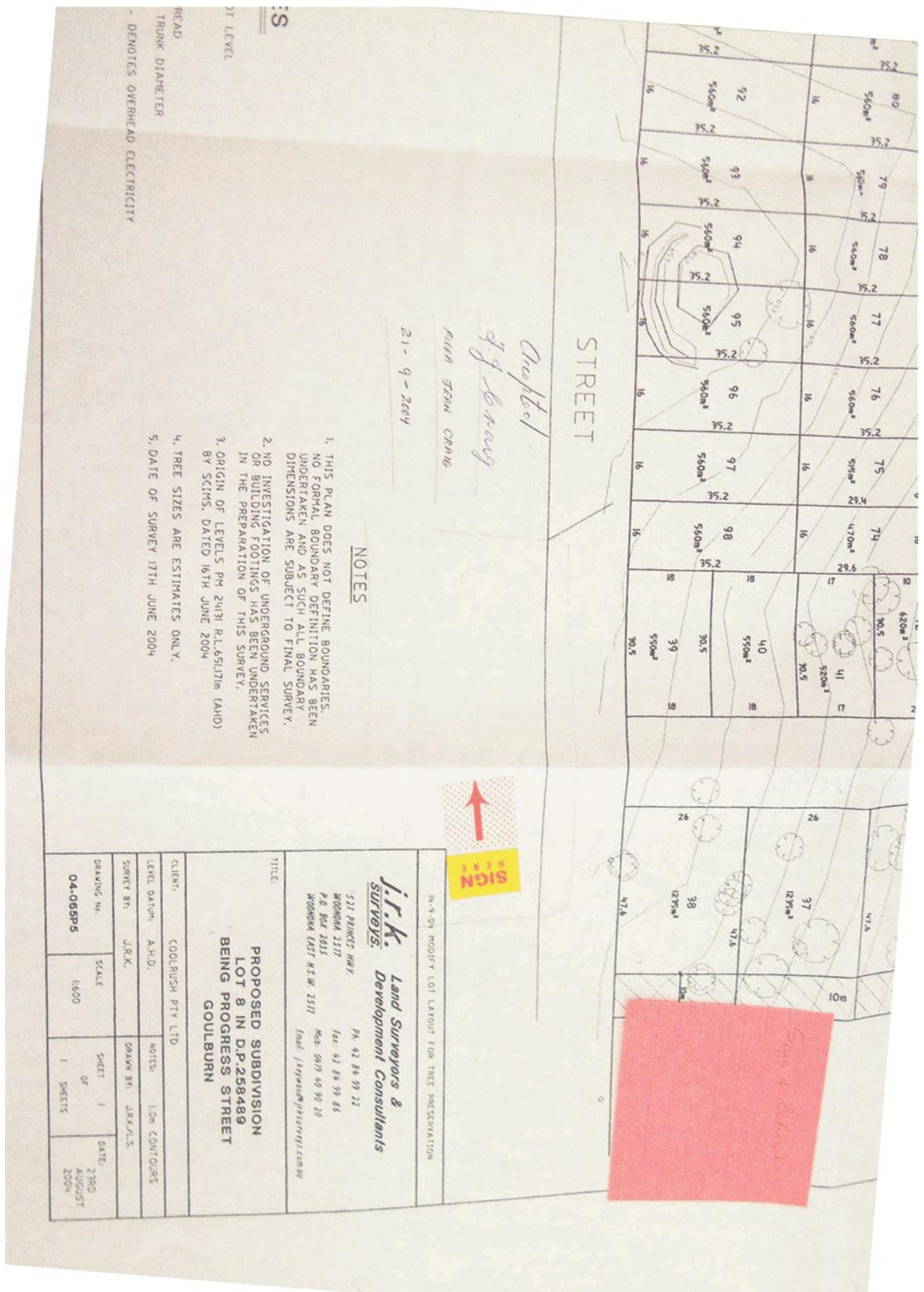
Our client submits that the LEP should be modified to enable E3 zoned lands within the subject site such that minimum lot sizes of 4 hectares (subject to slope stability constraints) for the purpose of erection of a residential dwelling on each such lot is permissible.

Yours faithfully

SOUTHERN CROSS CONSULTING SURVEYORS

Consultants in Surveying, Planning, Mining, Mapping, Engineering and Project Management







Little Developer Co.
46 Lucinda Avenue
Bass Hill NSW 2197

17 December 2019

The General Manager
Goulburn Mulwaree Council
Locked Bay 22,
Goulburn NSW 2580

RE: Draft Urban and Fringe Housing Strategy

Dear Goulburn Mulwaree Council

We write on behalf of Mr and Mrs Kelly, in relation to the revised *Draft Urban and Fringe Housing Strategy* (Draft Strategy), exhibited by Goulburn Mulwaree Council. We commend Council on the preparation of the Draft Strategy and for revisions following earlier exhibition and consideration this year. Effective strategic planning is essential to plan for expected continued population growth over the next 20 years. This submission relates specifically to the site located at 15108 Hume Highway, Marulan (Lot 12 DP 700290) (the Site), shown outlined in red at **Figure 1 and 2** below. The Site is approximately 40 hectares (ha) in size and has a 555-metre frontage to the Hume Highway to the south.

The subject site

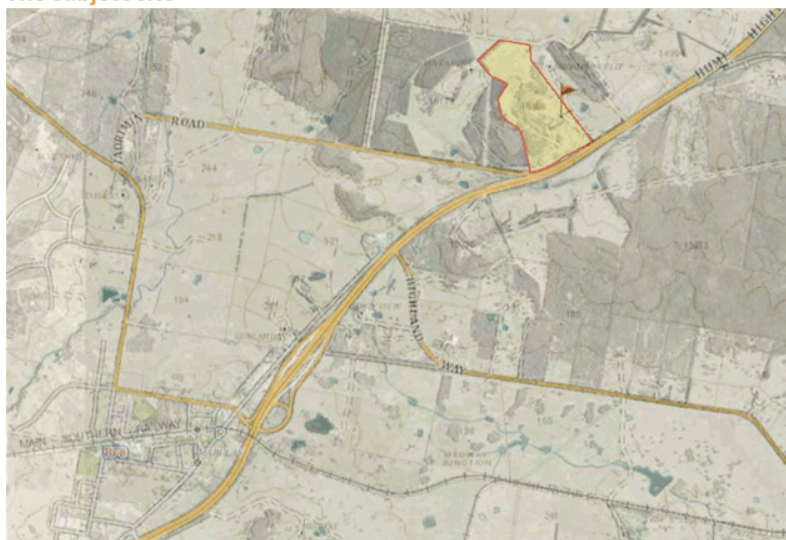


Figure 1 Location Plan

This plan illustrates the location of the Site (15108 Hume Highway), bounded by the red line and highlighted in yellow. The Site is located approximately 3km to the north east of the Marulan Town Centre.
Source: *SIX Maps*

15108 Hume Highway, Marulan | Submission – Draft Urban and Fringe Housing Strategy

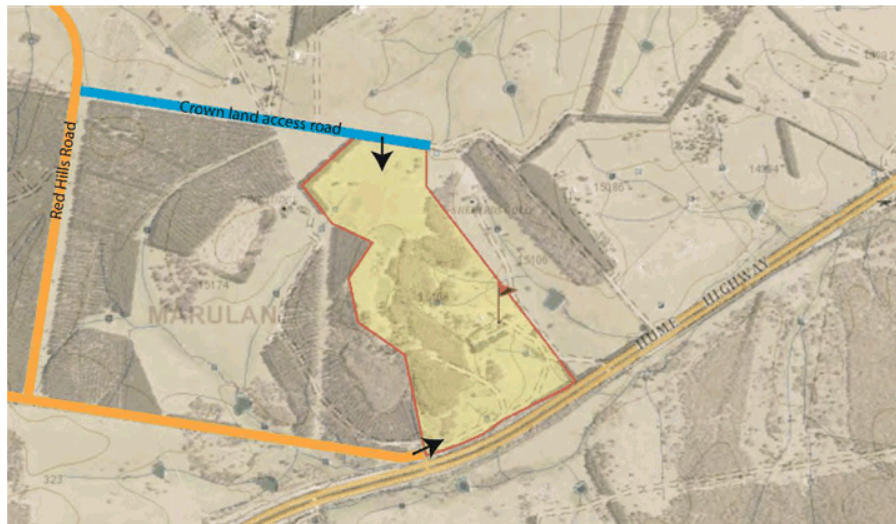


Figure 2 Site Plan

The map illustrates the location of the site in relation to the adjacent road network. The site benefits from two access points shown by the black arrows. Northern access to the site is provided off an access road located on Crown land that is connected to Red Hills Road to the west. The southern access point is provided off Red Hills Road at the south-east corner of the site.

Source: SIX maps

The Draft Strategy investigates and identifies areas suitable for the provision of additional housing supply in and around Marulan and Goulburn town centres, and has been prepared in response to both the limited supply of residential land to meet short to medium term needs of the community and the directions of the South East and Tablelands Regional Plan 2036. The Draft Strategy identifies opportunities for an additional 3,500 (approximate) dwellings over the next 18 years to 2036.

Little Developer Co recommends that Council include 15108 Hume Highway, Marulan (The Site) within the Strategy, given it is uninhibited by physical constraints, does not comprise areas of biodiversity values and is located immediately to the north of an area identified for urban residential expansion around Marulan.

In summary, the key components of this submission include:

- Overview of proposed housing vision and guiding principles,
- Suitability of 15108 Hume Highway for large lot residential / rural residential development



Overview of proposed housing vision and guiding principles

Overall, the draft housing vision and guiding principles are supported, particularly as outlined below.

Maximises the use of existing infrastructure and minimises the cost of development to Council and the community

Little Developer Co supports the attention placed on using existing infrastructure efficiently to minimise costs of development to Council and the community. This is pertinent given the anticipated growth of an additional 3,359 – 3,695 dwellings (average 3,500) over the next 18 years to 2036 in the LGA (average of 195 dwellings per year).

Little Developer Co encourages large lot residential / rural residential lots to be developed in areas where biodiversity impacts are acceptable, physical constraints can be managed and the site is deemed suitable. This lot typology does not require reticulated water and sewer and therefore reduces demands on Council to augment infrastructure to support growth. For merit reasons outlined here and below, Little Developer Co affirms that 15108 Hume Highway Marulan is a suitable location for rural residential lots to be developed, and the rezoning of this land should be investigated by Council as part of the Draft Strategy. The Site is generally uninhibited by physical constraints, is highly accessible, is in close proximity to the Marulan town centre, is under single ownership and is aptly serviced by electricity infrastructure. Further, the site is located along the northern fringe of land identified for serviced residential land in the Draft Strategy, and should therefore be considered in greater detail within the Draft Strategy.

Encourages and meets the demand for a range of lot sizes and dwelling types

Little Developer Co commends Council for recognising the importance of a diverse housing supply in meeting the needs of a changing LGA. The provision of a more diverse mix of lot sizes and housing types, improves housing choice and affordability. The provision of large lot residential / rural residential is considered an important aspect of the supply of housing options within a growing and changing LGA. As identified by the Draft Strategy, there is a limited supply of R5 Large Lot Residential zoned land in Marulan. Physical constraints, including the Hume Highway to the south east, topography, industry and other infrastructure constrain expansion of Marulan. The most viable expansion of the town centre is identified to the north.

Elton Consulting identify that the LGA experienced strong growth of 14% over the past decade. Of significance, is substantial population growth experienced by Marulan, that increased by 27% between 2006 to 2016. The growing demand for housing in Marulan, necessitates rigorous, evidenced based strategic planning which is exhibited within the Draft Strategy. Marked growth in Marulan also

15108 Hume Highway, Marulan | Submission – Draft Urban and Fringe Housing Strategy



necessitates consideration of areas on the fringes of the study area, in particular to the north where physical constraints are comparatively low.

Coupled with population growth is a changing demographic profile of the LGA, in particular, the 35 to 49, and 70 to 84 age groups will be the largest growing groups. In addition, Elton identify that childless households will comprise 59.1% of households by the year 2036, and the forecast occupancy ratio is 2.60 people per dwelling by 2036. Further, as house prices continue to rise in Sydney and Canberra, combined with technological advances such as high-speed rail will continue to further grow the strategic importance of the LGA in supplying housing needs to meet projected demand.

Considers opportunities for larger lots, especially around Marulan

As outlined within the Draft Strategy, it is assumed that Marulan will continue to grow as projected, with an additional 355 dwellings required to meet demand to 2036. To accommodate this growth, a land area of 53 ha is required. Marulan currently has approximately 20 ha of undeveloped residential land, equating to a deficit of 33 ha. This deficit asserts the importance of identifying suitable land for residential development, that is preserved for future urban residential zoning.

Elton Consulting has investigated potential areas of urban housing expansion for Marulan within the *Precincts and Opportunities for Development* diagram at Figure D (Elton Consulting, *Draft Urban and Fringe Housing Strategy*, pg. xvii). The Site is located to the north east of the opportunity area identified as "Urban release area long term." Little Developer Co recommends that Council consider including the subject site within the study area given the Site's proximity to land identified for future expansion, coupled with the suitability of the site for large lot residential / rural residential development.

The Draft Strategy outlines that Council data suggests that there is reasonable demand for rural residential development on the fringe of the study area, with rural residential developed typically in areas zoned R5 Large Lot Residential, RU6 Transition and E4 Environmental Living and with minimum lot sizes ranging from 2,000sqm to 10 hectares depending on zoning and minimum lot size. Council data also demonstrates consistent demand for larger lots on the urban fringe. The Draft Strategy highlights that within Goulburn's urban fringe, a total of 290 rural residential lots were subdivided over the last 10 years, of which approximately 200 dwellings have been approved or had a development application lodged, representing uptake of 70%. It could be forecast that a similar uptake would be experienced in Marulan once this lot typology is brought to the market.

Therefore, based on historical trends and evidence in the LGA, a portion of housing supply should be delivered in the form of large lot residential / rural residential on the urban fringe of Marulan. The subject site, 15108 Hume



Highway is a suitable site for larger lots and should be incorporated within the Draft Strategy.

Little Developer Co considers that a master plan driven subdivision of the Site can support the long-term sustainability of urban growth to the north of Marulan. Rezoning the Site from a minimum lot size of 40ha to 10ha can ensure an increased housing supply is delivered in the short to medium term. The master plan for the Site would demonstrate re-subdivision of the four 10ha lots is possible in the long term, through considered vehicular access and dwelling placement.

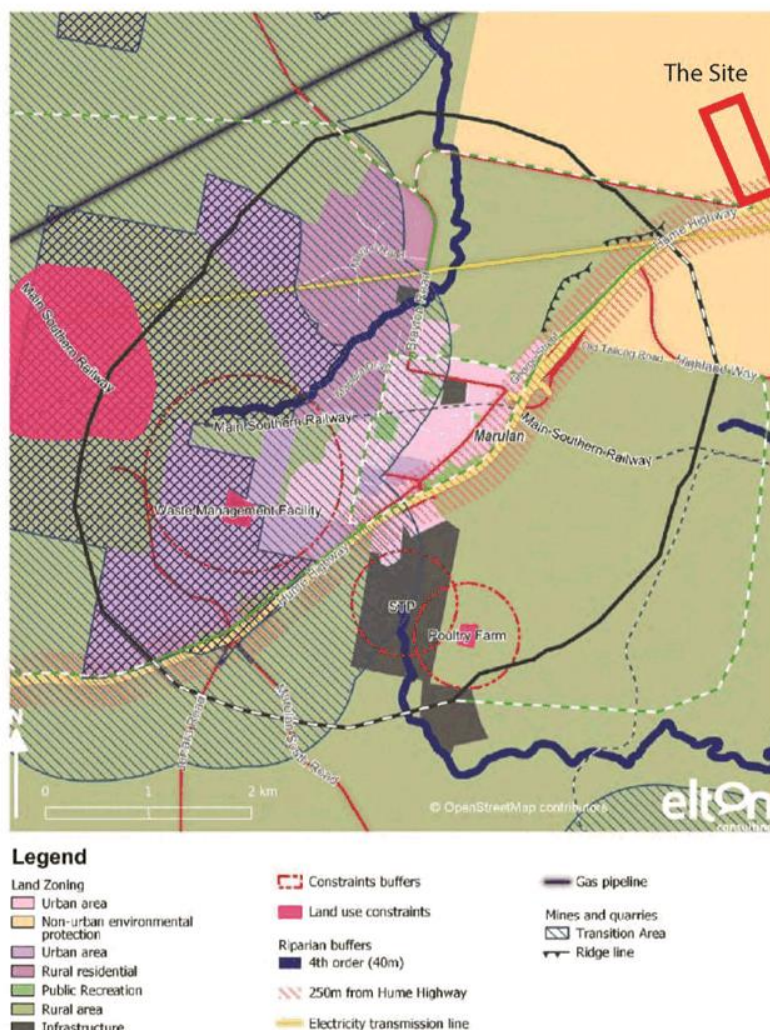


Figure 3 Marulan Constraints Map

This Map illustrates the location of the Site relative to constraints identified by Elton Consulting.

Source: Elton Consulting, 2019, Figure D, Draft Urban and Fringe Housing Strategy

15108 Hume Highway, Marulan | Submission – Draft Urban and Fringe Housing Strategy



Suitability of 15108 Hume Highway as an opportunity site to accommodate large lot residential

Little Developer Co encourages Council to include 15108 Hume Highway within the study area of the Draft Strategy and in doing so, investigate the potential of the lot to accommodate rural residential / large lot residential development. Little Developer Co considers that the Site has strong site strategic merit to support increased housing provision (i.e. subdivision of existing 40ha lot into four 10ha lots) for the reasons outlined below.

Little Developer Co makes the following observations following a site visit on Thursday 12 December 2019 and in reference to the findings of the Draft Strategy (in particular, Chapter 3 Opportunities and Constraints, *Marulan North Opportunities* map, pg. 129):

- There are minimal to no physical constraints that would inhibit the proposed rezoning and associated development of the Site for increased housing provision:
 - The site does not contain areas of biodiversity value. Notwithstanding, detailed ecological assessment of the site would be conducted as part of a future rezoning and subdivision process. Mitigation measures would be implemented to reduce or alleviate any negative impact to items of biodiversity value that are identified during future detailed investigation.
 - The Draft Strategy identifies bushfire prone land to the west of the Site. Little Developer Co affirms that the potential risk of bushfire can be appropriately managed through the use of asset protection zones and building design that responds to the bush fire attack level (BAL), multiple vehicle access points to the Site (northern boundary and southern boundary), in addition to detailed bushfire planning (i.e. preparation of a neighbourhood bushfire plan, and individual dwelling bushfire plans),
 - The Site is not affected by flooding,
 - The Draft Strategy identifies that areas of the site may be subject to erosion risk, and have a gradient over 18%. This finding is limited by a desktop based study, the findings of which would be likely be modified following detailed site analysis. Notwithstanding the potential erosion risk, large areas of the site are relatively flat, providing appropriate dwelling site, easy vehicle access.
 - The Site benefits from two access points, one to the north via a Crown land access road accessed of Red Hills Road, and an access point at the south west corner of the site. Dual access points provide an opportunity to ensure optimum vehicular access to the site, and support effective egress in the event of a bushfire.
 - The Site is an irregular shaped, elongated rectangle that extends in a north westerly direction from the Hume Highway. New dwellings



proposed as part of a future subdivision could be located outside the 250m buffer zone adjacent to the Hume Highway. Therefore, acceptable acoustic comfort can be achieved.

- The site is considered suitable for proposed subdivision, being the creation of four 10ha lots for the following reasons;
 - The Site is under single ownership, and is appropriately serviced by electricity,
 - The shape of the Site, combined with dual vehicle access points enables an ordered subdivision layout to be realised, that does not preclude future re-subdivision in the future,
 - The Site is located 3km north east of Marulan town centre and benefits from high accessibility to the Hume Highway. Future residents can utilise Hume Highway for longer journeys north and south, and local roads (Red Hills, Ambrose and Brayton Roads) for access to Marulan town centre,
 - Proposed rezoning (reducing minimum lot size from 40ha to 10 ha) and associated subdivision (creation of 4 x 10ha lots) provides an opportunity to established a desired precedent for transitioning between the serviced residential lots surrounding Marulan town centre, and large rural land holdings beyond. As shown at **Figure 4** below, the site is surrounded by a range of minimum lot size controls, including 5ha, 10ha and 20ha lot sizes immediately adjacent, and within 1.5km of the site. The proposed minimum lot size control of 10ha for the site is consistent with existing controls in the locality and would support the principles and objectives of the Draft Strategy.

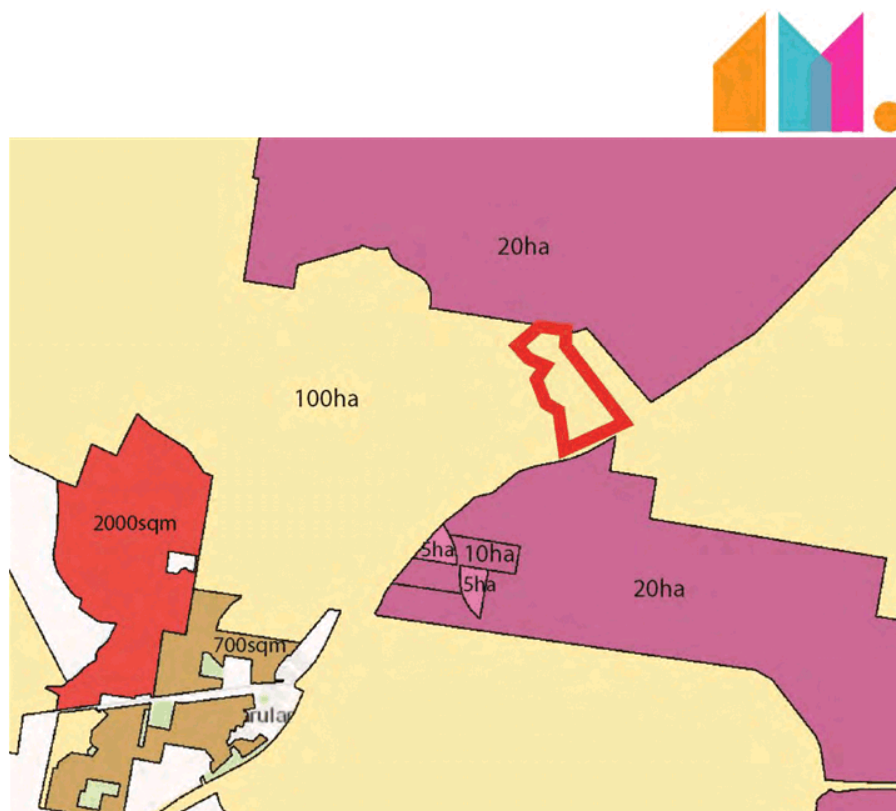


Figure 4 Minimum Lot Size Map

This figure illustrates the Goulburn Mulwaree Local Environmental Plan 2009 Minimum Lot Size control for the Site and surrounding land. The site, bounded by red outline is affected by a 100ha control.

Source: Goulburn Mulwaree Council Local Environmental Plan 2009



Conclusion

In summary, Little Developer Co. recommends that Council seriously considers including 15108 Hume Highway in the study area of the Draft Strategy due to the sites strategic merit and suitability in supporting the growing housing needs of Marulan towards 2036. Based on the available information and findings of the Draft Strategy, Little Developer Co. recommends that the minimum lot size of the site is reduced from 40ha to 10ha to facilitate a future subdivision of the site from a single 40 ha lot, to four 10 ha lots.

Little Developer Co. would welcome the opportunity to meet with Council in early 2020 to discuss the potential of the site.

Please feel free to contact the undersigned on 0423463363 should you wish to discuss this assessment in detail, or email info@littledveloperco.com.au.

Kind regards

Matthew Kelly
Urban Planner & Partner



Renshall Consulting
Urban and regional planning

To Whom it May Concern,

On behalf of my client the landowner I have been reviewing the Draft Urban Fringe Housing Strategy, it has raised an issue for a sight I have been working on for some time.

The site is 68 Range Road and 1 Bishopthorpe Lane, Baw Baw. It is currently in the transition zone and is forecasted as a release area in the Draft Strategy document with a 6.9-18-year future.

The portion of the site was a non-putrescible builders land fill. The filling process has ceased, and the capping process is underway. The site has been tested for gas leakage and has had shown zero emission. Tested on June 2019 by Consulting Earth Scientists.

The site abuts a rural residential zone as is, it therefore is our request that the zone be extended to include the site under investigation.

If not rezoned the land will sit unused and create a less than desirable landscape as the site has little to no agricultural use.

What is proposed as potential for the site is a subdivision into 14 Large Lot Residential sites at 4,000sqm each, with semi-private open space in the middle. The any residential buildings will not sit on the areas where filling has taken place.

The site is accessed by two roads, Range Road and Bishopthorpe Lane and is already connected to water, electricity and sewage.

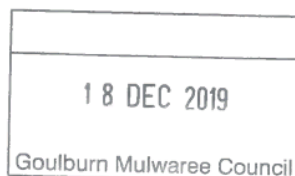
The kind of development we are proposing is in keeping with the local trend and will service the future of the area by providing further housing with the added benefit of semi-private open space in the middle. An equestrian arena has been mentioned as a possibility and such a use is permissible on the site of the former landfill.

We believe it is for the benefit of the Greater Goulburn Area that this site be put to a beneficial re-use. It is an example of the future use of waste management sites that will stimulate the area going forward.

We look forward to hearing from you and hopefully sitting down to discuss further.

Regards,
Jessica Renshall
Town Planner

T: 0408777767
W: www.renshallconsulting.solutions
E: Jessica@renshallconsulting.com

SCANNED

46 Mountain Ash Rd
Brisbane Grove
15 December 2019

The General Manager

Dear Sir

DRAFT URBAN & FRINGE HOUSING STRATEGY

I congratulate Council on the revised draft strategy, a much improved document. Also appreciated is that community input following the first draft has been considered.

- I note my site is identified as having biodiversity constraints. My previous submission indicated site 25 was adjacent my property & as both had been in my family for over 100 years I could not agree with biodiversity constraints being applied to site 25. I now note that relative to site 25 an assessment found there was sufficient evidence to conclude that biodiversity constraints are limited. As this site & my property formed a single family agricultural enterprise the same finding would apply to my property. I have known the whole area all my life & cannot agree with any claim of biological constraint
- My site is also stated to be in an area impacted by noise from the motor racing activities to the south west. Living here I can only say motor racing has virtually no noise impact. The most significant source of noise was heavy vehicles at the Brisbane Grove & Windellama Roads intersection while Lansdowne Bridge was closed
- On the map titled 10/11- Brisbane Grove & Mountain Ash constraints & opportunities I question the boundary of the 140.6ha portion. It appears to, in part, not follow lot boundaries, in effect splitting my property. I acknowledge the maps & boundary lines are possibly indicative only & not meant to be precise
- There appears to be an error in Precinct 19 field. A potential infill area is vacant blocks behind Goodstart Early Learning, access via Erith St. This area is actually in Precinct 18 Central Goulburn.
- I attended the "drop in" session & in discussion with Bennett Kennedy I remain unclear as to how "demand is established" yet this appears to be a consistent criteria. It seems very vague.

Regards

John Taylor



Wednesday, 18 December 2019

The General Manager
Goulburn Mulwaree Council
Locked Bag 22
Goulburn NSW 2580

Via email: council@goulburn.nsw.gov.au; submissions@goulburn.nsw.gov.au

Attention: Kate Wooll, Business Manager Strategic Planning

Dear Kate,

Re: Draft Goulburn and Marulan Urban and Fringe Housing Strategy

We act on behalf of Windemalla Road Pty Ltd, the owners of land at Mountain Ash Road, Brisbane Grove and provide this submission in support of Council's Draft Goulburn and Marulan Urban and Fringe Housing Strategy.

At its meeting of 15 October 2019 Council resolved to place the revised Draft Urban and Fringe Housing Strategy (Draft Strategy) on exhibition for a period of 8 weeks from 18 October to 18 December 2019.

The Draft Strategy presents a revised strategy which now considers large lot residential/rural residential opportunities when compared to the originally exhibited Housing Strategy that was publicly exhibited from 6 January to 22 February 2019 and focused only on urban areas of Goulburn and Marulan.

Our clients represent a large land holding, located south west of Goulburn, with a total area of 277ha, comprising Lot 1 DP 853498, Lot 1 DP 7797194, Lot 103 DP 70346, Lot 104 DP 126140, Lot 105 DP 126140, Lot 106 DP 126140, Lot 1 DP 835278, Lot 2 DP 835278, Lot 3 DP 835278, Lot 1 DP 731427, Lot 22 DP 811954, Lot 23 DP 811954, Lot 24 DP 811954, as depicted within the following figures.

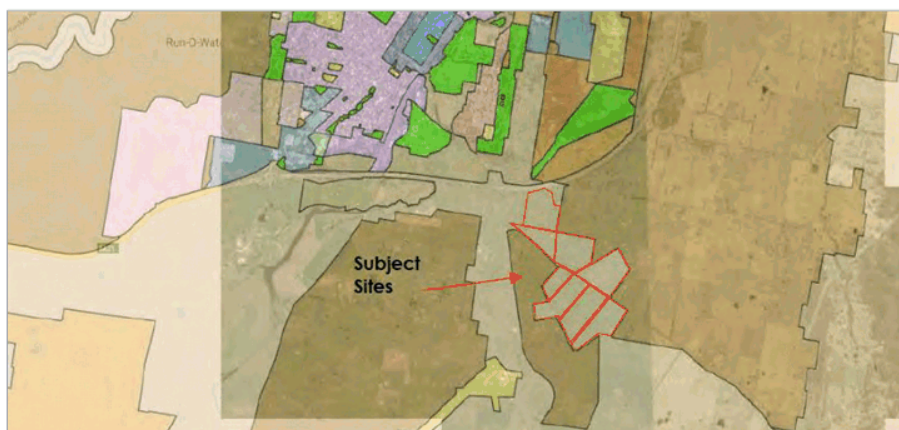


Figure 1: Location Plan (Source: NSW Planning Portal modified by TCG Planning)

Level 2, 3 Horwood Place, Parramatta NSW 2150 | T: 02 8667 8668 | F: 02 8079 6656
E: info@mecone.com.au | W: mecone.com.au

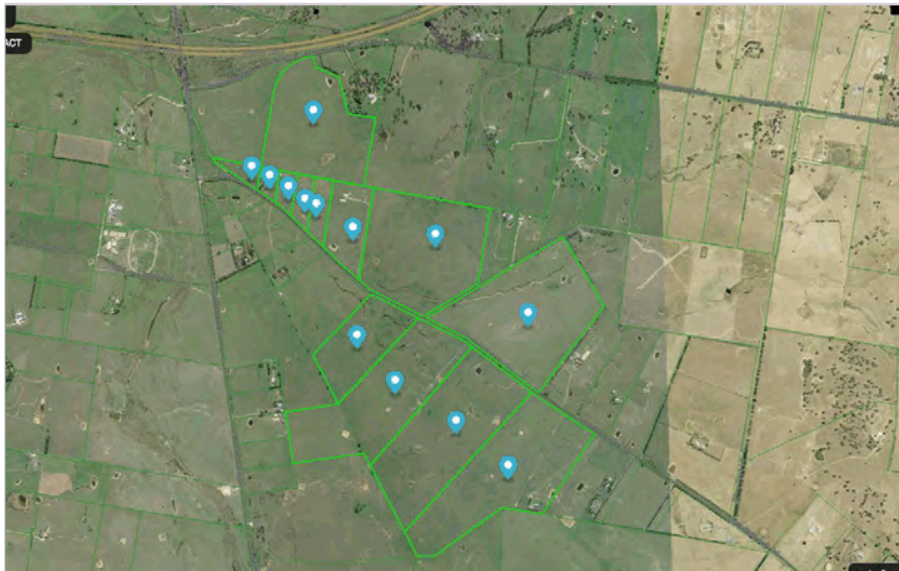


Figure 2: Aerial photograph of site (Source: Mecone Mosaic)

A submission was prepared by Georgia Sedgmen of Mecone Pty Limited and Elaine Treglown of TCG Planning during original exhibition of the Housing Strategy in relation to the subject land.

Urban and Fringe Housing Strategy

The Housing Strategy prepared by Elton Consulting on behalf of Council has investigated and identified areas suitable for the provision of additional housing to meet the housing demands generated by continued population growth.

The Housing Strategy has been prepared in response to the limited supply of residential land available in the short to medium term, as well as the directions of South East and Tablelands Regional Plan 2036.

The revised Draft Strategy now identifies land for large lot residential development, typically greater than 2ha.

We congratulate Council on the revision of the Draft Strategy to consider the opportunity afforded by rural residential development to increase larger lots on the urban fringe and provide additional housing diversity.

Large Lot Residential Demand

Large lot residential lots are identified as lots ranging from 2,000sqm to 10 hectares on the urban fringe not connected to both reticulated water and sewer. Typically located in areas zoned R5 Large Lot Residential, RU6 transition and E4 Environmental Living.

The Draft Strategy identifies an approximately 70% take up rate over the last decade of these types of lots, demonstrating a consistent demand for larger lots on the urban

fringe.

Current supply is identified at 90 lots, comprising those lots created over the last decade, which have not sought approval for a dwelling.

In addition, the 90 lots have been assumed to comprise 4.5 years supply, based on a historic take up rate of 20 lots per annum.

We suggest that while this information has been informed by the data available, these figures are not an entirely accurate representation of historic or future demand for large lot residential land, given the particular conditions of rural residential development.

As rural residential developments do not rely on the financial outlay for infrastructure delivery associated with residential development, it is typical that lots can be released slowly as the establishment costs do not need to be recuperated.

It is also typical that land owners will retain large lots for family members or delayed development which artificially constrain this market.

Our clients have developed large lot residential estates within the region which have experienced strong market demand over the last two decades including:

- Run-O-Waters estate comprising around 130 lots ranging in size from 3-5 acres which sold within a period of around 5 years.
- The Meadows Stage 1 comprising around 25 lots ranging in size from 3-5 acres which sold off the plan within a 12 month period and settled at registration of the lots.
- The Meadows Stage 2 comprising around 15-20 lots ranging in size from 3-5 acres which sold off the plan within a 12 month period and settled at registration of the lots.
- Wollon Hills comprising around 8 lots of 25 acres each which sold off the plan within a 12 month period.

The only lots which were not sold in the above developments, were those that were intentionally held by the land owner for reasons not influenced by buyer interest.

Our clients have always found there to be significant buyer interest in these lot sizes within the region due to the limited availability of rural residential lots.

Dwelling Assumptions

The Draft Strategy identifies large lots on the urban fringe of Goulburn to comprise a total of 360 lots ranging from 1-2ha and totalling around 1,029ha. This number of dwellings would comprise 10% of the total lots proposed as a result of the Draft Strategy.

The proposed lots are identified within 11 precincts on the urban fringe of Goulburn, defined by physical characteristics.

Constraints

The constraints for Goulburn have been combined within Figure A. The maps have been prepared to sieve out that land which presents a challenge to development and in doing so identifies land that is the least constrained.



Figure 3: Constraints map

The subject site is mapped to be primarily free of constraints with the exception of a riparian buffer and some land identified as ELA Vegetation (Validated).

Precinct Approach

The site is identified as Mountain Ash with an identified potential of 164 large lots, comprising 47% of the large lots proposed in Goulburn. This number of lots is anticipated to provide 8.2 years supply.

The following figure identifies the precincts and opportunities within the urban fringe of Goulburn.

We note that Mountain Ash is identified with a High Priority of Short-term delivery within 12 months and provides for a minimum lot size of 2 hectares.

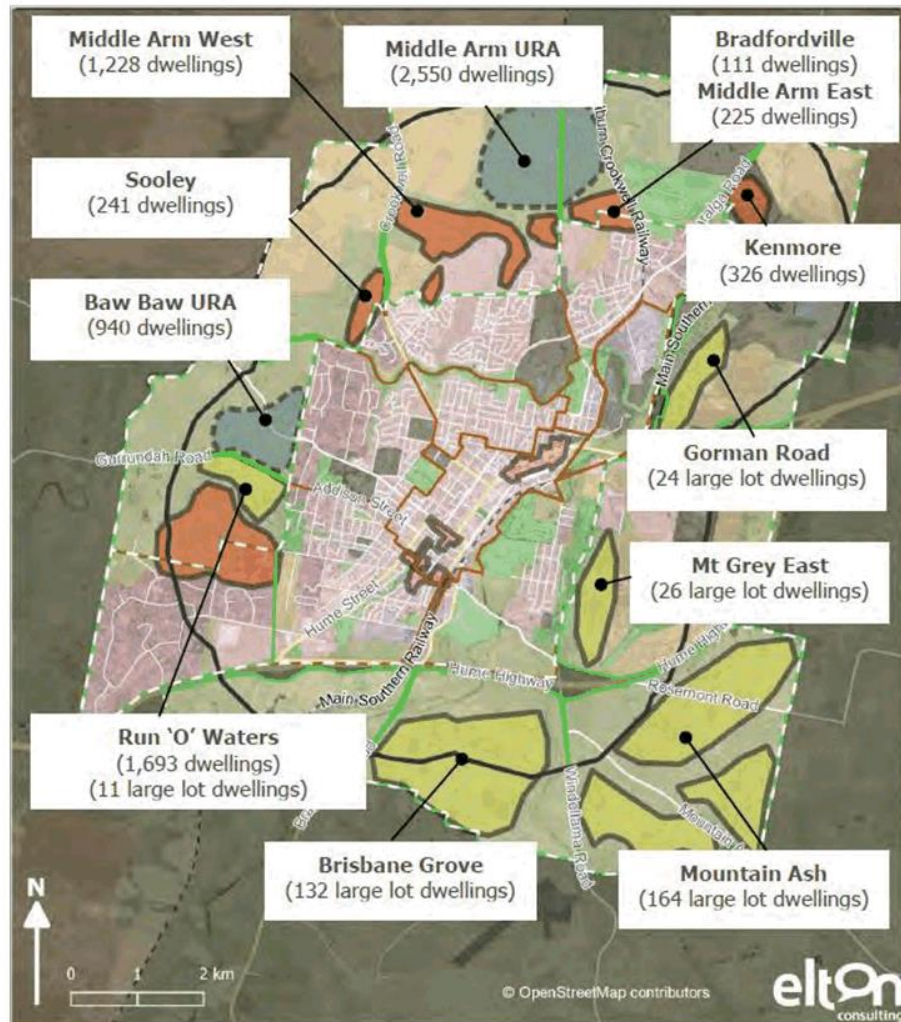


Figure 4: Precincts and opportunities for development

R5 Large Lot Residential Zone

The Draft Strategy identifies R5 Large Lot Residential as the appropriate zone for rural residential and lifestyle lots.

The large lot residential zone, has a similar land use table to the other residential zones, although typically provides for larger dwellings on larger blocks of land. The objectives of the zone provide as follows:

- To provide residential housing in a rural setting while preserving environmentally sensitive locations and scenic quality.

- To ensure that large residential lots do not hinder the proper and orderly development of urban areas in the future.
- To ensure that development in the area does not unreasonably increase the demand for public services or public facilities.
- To minimise conflict between land uses within this zone and land uses within adjoining zones.
- To facilitate and promote an increased range of residential opportunities by providing for low intensity residential development compatible with the rural characteristics of the locality.
- To encourage subdivision of land that is consistent with the constraints and opportunities of the land.

The Draft Strategy notes that despite being an inefficient land use, this form of development is not uncommon in regional areas. The Minimum Lot Size for land in the R5 zone ranges from 2,000sqm to 2ha.

The subject site is currently zoned RU1 Primary Production which provides the following objectives:

- To encourage sustainable primary industry production by maintaining and enhancing the natural resource base.
- To encourage diversity in primary industry enterprises and systems appropriate for the area.
- To minimise the fragmentation and alienation of resource lands.
- To minimise conflict between land uses within this zone and with adjoining zones.
- To promote the use of agricultural land for efficient and effective agricultural production.
- To avoid or minimise impacts on the natural environment and protect environmentally sensitive land.
- To allow the development of non-agricultural land uses which are compatible with the character of the zone.
- To allow the development of processing, service and value-adding industries related to agriculture and primary industry production.
- To protect and enhance the water quality of receiving watercourses and groundwater systems to reduce land degradation.
- To minimise the visual impact of development on the rural landscape.

In order to facilitate delivery of large lot residential development as envisaged by the Draft Strategy, the Mountain Ash precinct will need to be rezoned from RU1 Primary Production to R5 Large Lot Residential.

Precinct constraints and opportunities

The Draft Strategy includes a snapshot of each identified precinct which includes a description, key character and planning controls, contains and opportunities and key recommendations.

Precinct 10 Mountain Ash

Locality description

A rural and rural transition area south of the Hume Highway, on both sides of Mountain Ash Road.

Residential development is typically rural with landholdings consisting of multiple lots.

Housing Gaps

Lack of infrastructure (roads, utilities connections) and distance to nearby services (shops, schools, community facilities) will prevent the precinct from delivering affordable or higher density residential development.



Character & Planning Controls

Key residential typologies	Detached dwellings on single lots A small number of rural-residential lots
Land use zoning	RU1 Primary Production RU6 Rural Transition
Permitted residential typologies	Backpackers' accommodation, Bed and breakfast accommodation, dwelling house
Minimum lot size	100 hectares (RU1) 10 -20 hectares (RU6)
Heritage	Listed in GMLEP 2009: <ul style="list-style-type: none"> Dwelling, "Wyoming", Lot 1, DP 794750 Dwelling, "Homeden", Lot 67, DP 126140 Nooga, Lot 98, DP 802308 "Irrilwilbin" Lot 2, DP 853498

Recommendations

- Rezone the land that is least constrained by topography and environmental constraints to a Large Lot Residential zone.
- Amend GMLEP to address anomalies in split zone created by Highway.
- Priority – High

Land Use Opportunities and Constraints

Mountain Ash precinct is not currently serviced by water and sewer infrastructure:

- Water infrastructure is constrained due to water pressure and proximity to connection and would likely be linked to Brisbane Grove precinct.
- Sewer infrastructure is constrained due to proximity to connection and likely requirement for a localised pumping station, some enlargement of downstream collection network is also likely to be necessary (subject to network modelling).

Environmental Constraints

- The majority of vegetation in the precinct has been removed for agricultural purposes and is therefore significantly disturbed and represents low ecological value. However, rapid validation of precinct TEC by ELA found approximately 14.37ha of Box Gum woodland / Yellow Box – red gum woodland EEC.
- The precinct contains large areas of land identified as being bushfire prone.
- Proximity to Goulburn Airport could limit density of residential development.
- Proximity to Wakefield Park imposes a noise constraint on this precinct.
- Flooding near water courses.
- On-site sewer systems must be at least 100m clear of a watercourse.

Analysis of Evidence

Opportunity to address zoning anomaly created by Highway between E and RU6 zones between Mt Gray and Mountain Ash precincts.

On-site sewer cannot be within 100 m of a water course of any classification.

Suited to Large Lot Residential development subject the resolution of noise issues.

Opportunities for Precincts 10 and 11 have been considered together.

As detailed, Mountain Ash is identified as Precinct 10, described as a rural and rural transition area south of the Hume Highway on both sides of Mountain Ash Road.

The lack of infrastructure (roads, utilities connections) and distance to nearby services (shops, schools, community facilities) will prevent the precinct from delivering affordable or higher density residential development, which is why the precinct has been found appropriate for large lot residential development.

The recommendations for the precinct are:

- Rezone the land that is least constrained by topography and environmental constraints to a Large Lot Residential zone.
- Amend GMLEP to address anomalies in split zone created by Highway
- Priority – High

Site Specific Analysis

As detailed within our previous submission, a High Level Preliminary Ecological Assessment has been undertaken by Pat Gunane, a Senior Ecologist with Macrozamia Environmental (BAM Assessor Accreditation Number BAAS19018) in July 2019. A copy is attached.

The report was prepared by Macrozamia Environmental for the owners to provide a brief analysis of ecological and biodiversity environmental planning factors that should be considered in the future uses of the land. Specifically modifying the zoning and the minimum lot size.

The area is identified as a gently undulating agricultural landscape with minor, intermittently flowing drainage lines. The paddocks are dominated by pasture and trees are very infrequent.

The vast majority of the lands are mapped as Biodiversity on the LEP Terrestrial Biodiversity Map.

The purpose of the report is to identify any important biodiversity features that may restrict future land uses on the site with consideration of the NSW Biodiversity Conservation Act 2016 (BC Act) and the Commonwealth Environment Protection and Biodiversity Conservation Act 1999 (EPBC Act) as well as locally significant biodiversity values.

A desktop study of the site was undertaken, as well as a site inspection on 8 July 2019.

The findings concluded that the whole site is occupied by improved pasture that has a long history of cultivation. No native vegetation communities occur, this is consistent also on adjoining lands.

It was noted that during the site inspection much of the site was bare soil.

In relation to habitat, the assessment found that important habitat components including a variety of plant species, a variety of vegetation structures, coarse woody debris, rock and standing or terrestrial hollows are absent or very sparse. Surface water occasionally occurs in farm dams or pooling in intermittent drainage lines.

"No habitat continuity occurs within the site, habitat continuity in the landscape is also poor."

*"No important habitat for **threatened species or communities** were recorded on the site or considered likely to use the site."*

Further to the Preliminary Ecological Assessment, Greg Todd of Southern Region Land Engineering was engaged to undertake an assessment of the land and any available flood information, in order to prepare an indicative lot layout of the subject site, in accordance with the recommendations of the Draft Study.

The extent of the flooding shown on the plans was determined using topographical data obtained from the ELVIS – Elevation & Depth – Foundation Spatial Data.

Hydrological Modeling was undertaken using WBNM ('Watershed Bounded Network Model' Boyd et al, 2007) which enables simulation of complex catchment behavior.

TUFLOW was then used to model the hydrodynamic behavior in the watercourses and floodplains. Two 100yr ARI scenarios were analysed:

- Gunday Creek which is a very large rural catchment area applying a 720min critical duration
- Local creek inflows applying a 120min critical duration

The rising waters from the Gunday Creek system were found to have little impact on the site.

The following figure provides an extract from the modelling showing the extent and depth of the 1% AEP inundation which shows that the depth of water for large areas is between 0 and 250mm.

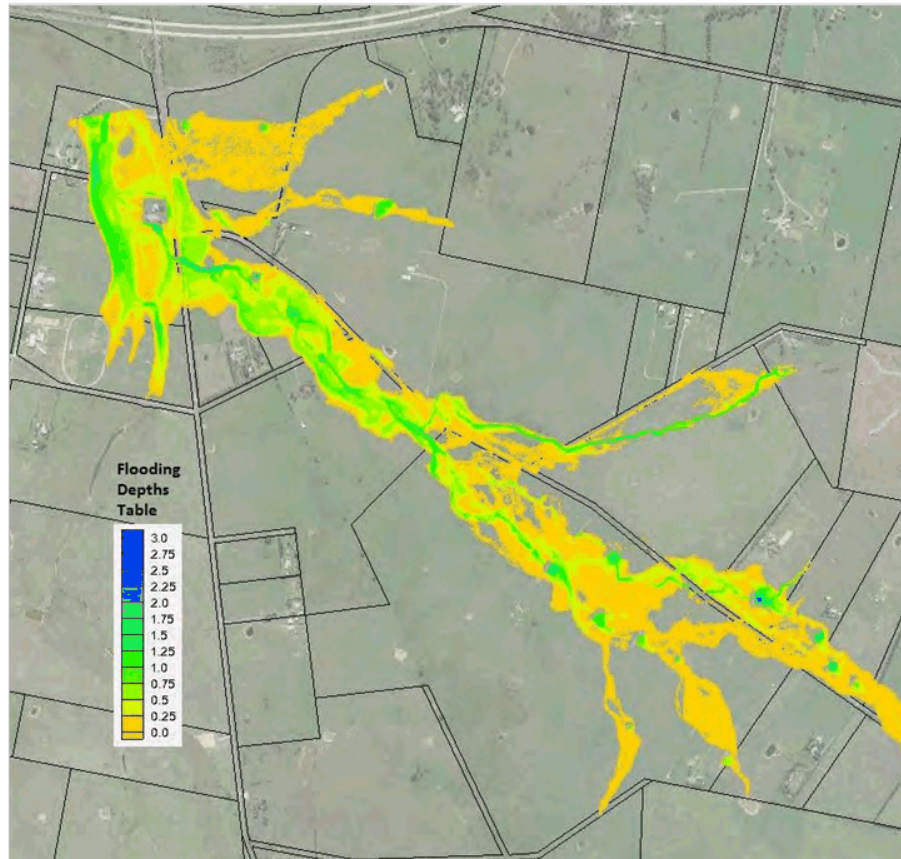


Figure 5: 1% AEP inundation map extract (Source: S.R.L.E.)

Also depicted on the plans is the alignment of the existing watercourses, including a 40m buffer that has been shown on either side of alignments to identify areas unsuitable for effluent disposal areas.

The lot layout presented allows for a minimum area of 2,000m² for effluent management which is separate to any 40m buffer identified. All of the lots, with the exception of proposed lot 28 have access from an adjoining road frontage that is not subjected to inundation in the 1% AEP flood event.

Proposed Large Lot Residential Subdivision

A proposed large lot residential subdivision has been prepared in response to the Draft Strategy by considering the opportunity and development potential of the site if a R5 Large Lots Residential zone was applied with a minimum lots size control of 2ha, as recommended by the Draft Strategy.

The draft subdivision layout provides for a total of 119 lots, ranging in size from 2ha to 3.92ha, based on topography and constraints.

The scheme was developed through analysis of the existing land holding, particularly in consideration of the 1% AEP and watercourse effluent disposal zones.

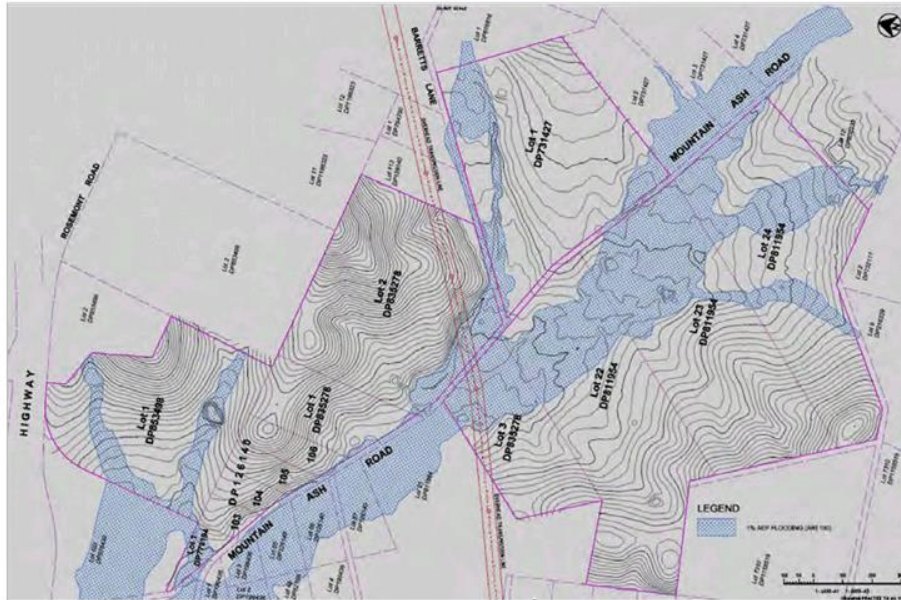


Figure 6: Site Plan extract (Source: S.R.L.E.)



Figure 7: Lot Layout and Hydraulic Constraints (Source: S.R.L.E.)



Figure 8: Lot Layout (Source: S.R.L.E.)

A copy of the proposed lot layout and hydraulic constraints are attached to this letter.

As detailed within the proposed layout, the subject site will allow for a total of 119 lots exceeding 2ha once topography and constraints are considered.

Land Use Planning Approach

The Draft Strategy adopts an approached to land use planning that is designed to support the delivery of a diverse range of housing in the right location and includes opportunities for large lot residential development.

The land use planning approach is detailed within the following table.

Finalise and endorse the Urban and Fringe Housing Strategy	
Planning Proposal	Local Strategic Planning Statement
Analysis of planning controls to support the delivery of the Strategy through a Council led Planning Proposal to deliver Short and Medium Term Development Opportunities	Overview of land use, direction and character of the LGA to inform LEP and DCP amendments, give weight to the District Plan and Council's community strategic plan.
LEP Amendment, DCP Amendment and Urban Release Area Investigations	
<ul style="list-style-type: none"> » LEP areas identified for potential amendments, informed by principles and constraints analysis development in the Strategy to <ul style="list-style-type: none"> > Harmonise controls to form a revised LEP including overall aims of the LEP and zone objectives > Review residential and non-residential controls in Goulburn City Centres; controls to activate appropriate housing fronting laneways; encourage shop top housing in City Centre and review FSR and height controls in the City Centre » DCP – the DCP provides further guidance for development, and of particular inclusion are character statements; landscaping and design guidance updates. Site specific DCPs should also be prepared to support Urban Release Areas. Once identified as URAs in the LEP these areas should be identified as excluded areas in the current DCP until site specific chapters are added to address Part 6 of the LEP. 	
Local Contributions review to include urban fringe	
Based on projected dwellings and population to ensure local infrastructure can occur as and when needed. Align Local Contribution Plans with Urban Release Areas	
Ongoing monitoring	

Figure 9: Land Use Planning Table (Source: Draft Urban and Fringe Housing Strategy)

Based on the approach detailed within the Draft Strategy, it is assumed that Council will undertake a Council led Planning Proposal to rezone the subject land R5 as a Short Term Development Opportunity, identified with high priority.

The number of lots which can be achieved on the subject site, comprising approximately 263 hectares is 119, which is below the maximum identified for the Mountain Ash precinct.

Table 26 Dwelling Opportunities Large Lot Residential Goulburn

Precinct	Area Identified (ha)	No. Dwellings /lots*	% total new dwellings	Priority	Years Supply
Large Lot Residential					
2 Run 'O' Waters	50.5	11		High	0.6
There may be an opportunity to consider a smaller MLS 2000-4000 sqm should water and sewer infrastructure become available in the long term.					
8 Gorman Road	86.84	30	9	High	1.5
9 Mt Gray	72.89	26	7	High	1.3
10 Mountain Ash	467.45	164	47	High	8.2
11 Brisbane Grove	376.13	132	38	High	6.6
Sub-Total	1003.31	352	100	-	17.6

*based on MLS of 2ha. Lots may be larger which will impact yields

Figure 10: Dwelling opportunities (Source: Draft Urban and Fringe Housing Strategy)

Actions

The Draft Strategy is ambiguous with regard to the proposed Council led Planning Proposal, where the Actions do not identify rezoning of the large lot residential land previously identified.

Direction E within the Actions provided at Section 5 of the Draft Strategy provides:

"E1 – Development of criteria for rezoning applications including a set of development principles that can be applied to future unsolicited Planning Proposals."

Direction E: Manage rural lifestyles (SETRP Direction 28)				
Strategy	Action	Implementation Outcome	Timeframe	Responsibility
E1 Support the strategic location of lifestyle development	E1-1 Development of criteria for rezoning applications including a set of development principles that can be applied to future unsolicited Planning Proposals.	Criteria adopted and being applied	Short	Council

Figure 11: Actions extract (Source: Draft Urban and Fringe Housing Strategy)

This action appears to indicate that rezoning of the large lot residential land, which is identified throughout the Draft Strategy will not be included in the Council led Planning Proposal.

We request clarification on this item and suggest that any Council led Planning Proposal which results from finalisation of the Draft Strategy should include the appropriate R5 Large Lot Residential zone and 2ha Minimum lot size as envisaged by

the Draft Strategy. As detailed as Section 2.5.5, 38 individual requests for land to be rezoned have been received from Council since 2009. The Draft Strategy identifies that most of these sites were seeking subdivision for lifestyle lots of 2ha or more in un-serviced areas.

If Council does not proceed with a Council led Planning Proposal to incorporate the five large lot development precincts, it is likely that all identified land holdings will be submitted as individual Planning Proposals, creating unnecessary fragmentation of the rezoning recommended by the Draft Strategy.

Conclusion

We commend Council on the revision of the Draft Strategy to incorporate the opportunities for large lot residential opportunities on the urban fringe.

The revised Draft Strategy has identified our client's land within the Mountain Ash precinct and found it to be appropriate for rezoning as R5 Large Lot Residential land with a minimum lots size of 2ha.

In response, we have undertaken preliminary ecological investigation and flood investigation in order to prepare an appropriate subdivision scheme for the land that responds to the recommended zoning and lot size development standard, as well as considering the relevant constraints.

We have attached the draft subdivision to this submission for Council's consideration and note that rezoning for this precinct is identified by the Draft Strategy as a High priority which is detailed as a 12 month period.

As discussed above, the Draft Strategy is ambiguous with regard to whether the R5 Large Lot Residential zone proposed will be subject of a Council led Planning Proposal or if the Draft Strategy anticipates that each site identified within the 1,000ha identified for Large Lot Residential land will be subject of individual proponent led Planning Proposals.

We encourage Council to consider the R5 land within the Council led Planning Proposal to avoid the fragmentation of this strategic approach and the submission of a series of proponent led PPs, which could total up to 38 separate PPs, based on previous representations to Council.

We welcome the opportunity to meet with Council and discuss the potential of the subject site and the proposal subdivision provided within the submission.

Please do not hesitate to contact me on 02 8667 8668 or via email at gsedgmen@mecone.com.au if you wish to discuss the content of this letter in further detail.

Yours sincerely,



Georgia Sedgmen



Appendix 1 – Preliminary Ecological Assessment





consulting.macrozamia.com.au
info@macrozamia.com.au
abn 37 902 748 749

High level Preliminary Ecological Assessment

Various lots, known as “The Hub”

Mountain Ash Road, Goulburn, NSW.

Windellama Road Pty Ltd

July 2019

Version	Final
Date	10 July 2019
Project Number	140053_1

High Level Preliminary Ecological Assessment
 “The Hub” Mountain Ash Road, Goulburn.

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High Level Preliminary Ecological Assessment
"The Hub" Mountain Ash Road, Goulburn.

1. Introduction and Background

1.1. Background

This report has been prepared by Macrozamia Environmental for the owners of the subject lands who are seeking a brief analysis of ecological and biodiversity environmental planning factors that should be considered in the future uses of the land. Specifically modifying the zoning and the minimum lot size. Appendix 1 of this report provides relevant site plans.

The site is located on Mountain Ash Road 4km to the southeast of Goulburn City, the area is a gently undulating agricultural landscape with minor, intermittently flowing drainage lines, dwellings are sparse, paddocks are dominated by pasture and trees are very infrequent. The site is dissected by an arterial road, Mountain Ash Road and a rural road, Barretts Lane and is part of the Goulburn Mulwaree Local Government area and subject to the Goulburn Mulwaree Local Environmental Plan 2009 (LEP).

Under the LEP the land is zoned *RU 1 Primary Production* and the minimum lot size is mapped as *AD 100 ha* except for one lot which is mapped as *AB2 20 ha*. The vast majority of the lands are mapped as *Biodiversity* on the *LEP Terrestrial Biodiversity Map*.

Immediately adjoining lands to the north, east and west are zoned as *RU 6 Transition* and the lands to the north mapped as *AB1 10 ha* minimum lot size and east are mapped as *AB2 20 ha* minimum lot size.

1.2. Aims of this Report

The purpose of the report is to identify any important biodiversity features that may restrict future land uses on the site with consideration of the *NSW Biodiversity Conservation Act 2016* (BC Act) and the *Commonwealth Environment Protection and Biodiversity Conservation Act 1999* (EPBC Act) as well as locally significant biodiversity values.

The potential for matters protected by these acts has been considered and where further investigation would be required prior to any development.

High Level Preliminary Ecological Assessment
“The Hub” Mountain Ash Road, Goulburn.

2. Methodology

2.1. Site Inspection

This site was inspected on 8 July 2019, weather conditions were cool and overcast and there had been light rain prior to and during the inspection. Despite poor conditions for observing fauna, conditions were considered sufficient given the simplified nature of habitats on the site and the scope of the assessment. Conditions were adequate to consider the key flora species and vegetation communities occurring.

During site inspections the site was traversed to confirm vegetation communities compositions and boundaries estimated using aerial photograph interpretation both on the subject lands and adjoining lands.

2.2. Desktop Research

Desktop research was undertaken using the NSW Office of Environment and Heritage's (OEH) BioNet database and threatened species profile databases for the district, in order to attain information relating to threatened species, populations and ecological communities and their potential to occur within the study area.

OEH threatened species profiles and other OEH threatened species publications were used to gain an understanding of the habitat requirements and ecology of potentially occurring threatened species and communities.

High Level Preliminary Ecological Assessment
"The Hub" Mountain Ash Road, Goulburn.

3. Results

3.1. Vegetation Communities

The whole site is occupied by improved pasture that has a long history of cultivation. No native vegetation communities occur, this is consistent also on adjoining lands. During the site inspection much of the site was bare soil.

3.2. Habitats

Important habitat components including a variety of plant species, a variety of vegetation structures, coarse woody debris, rock and standing or terrestrial hollows are absent or very sparse. Surface water occasionally occurs in farm dams or pooling in intermittent drainage lines.

No habitat continuity occurs within the site, habitat continuity in the landscape is also poor.

Drainage lines on the site and some margins adjoining neighbouring tree lines offer slightly improved biodiversity and habitat complexity.

3.3. Likelihood of Importance for Threatened Matters

No important habitat for threatened species or communities were recorded on the site or considered likely to use the site.

High Level Preliminary Ecological Assessment
"The Hub" Mountain Ash Road, Goulburn.

4. Conclusions and Recommendations

This site has a long history of agricultural use and very little native vegetation or habitat for native flora and fauna remain. This is typical in this locality where grazing enterprises dominate land use and have done for many years.

Due to its highly modified nature, its lack of habitat components and vegetation diversity it is considered unlikely that the site has any special biodiversity characteristics or requirement for conservation or that threatened species or communities would be likely to occur.

From a biodiversity and ecological perspective it would be appropriate to modify the land zoning and minimum lot size of the subject lands to that of adjoining lands being *Zone RU 6 Transition* and *AB1 10 ha* minimum lot size.

Any development of the site would be subject to further assessment under the NSW *Biodiversity Conservation Act 2016* and the Commonwealth *Environment Protection and Biodiversity Conservation Act 1999*.

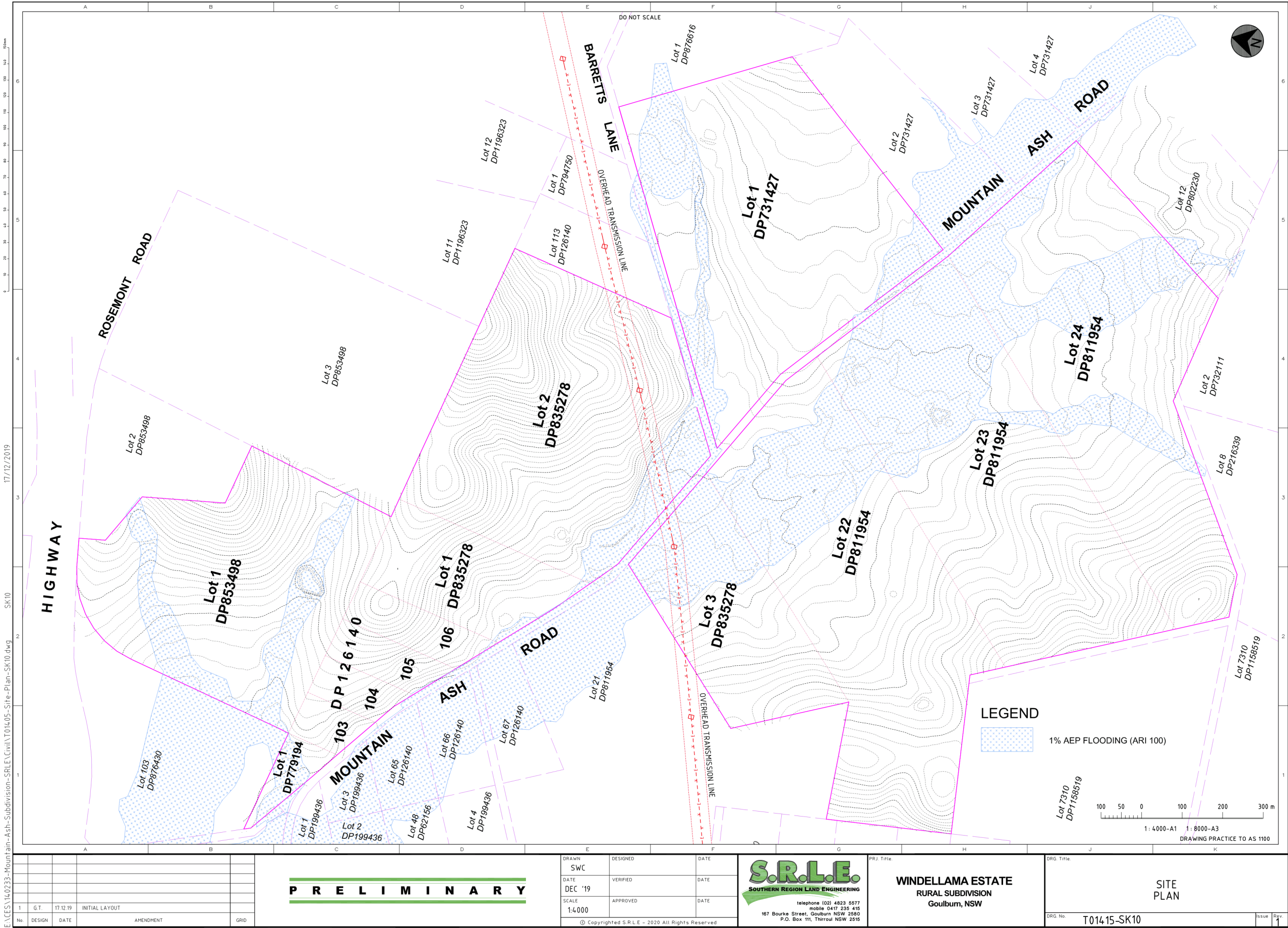
As the lands are mapped as Biodiversity under the LEP Terrestrial Biodiversity Map, Clause 7.2 of the LEP applies. Consequently, any future development consent must not be granted unless the consent authority has considered a report that addresses biodiversity matters identified in that clause.

High Level Preliminary Ecological Assessment
"The Hub" Mountain Ash Road, Goulburn.

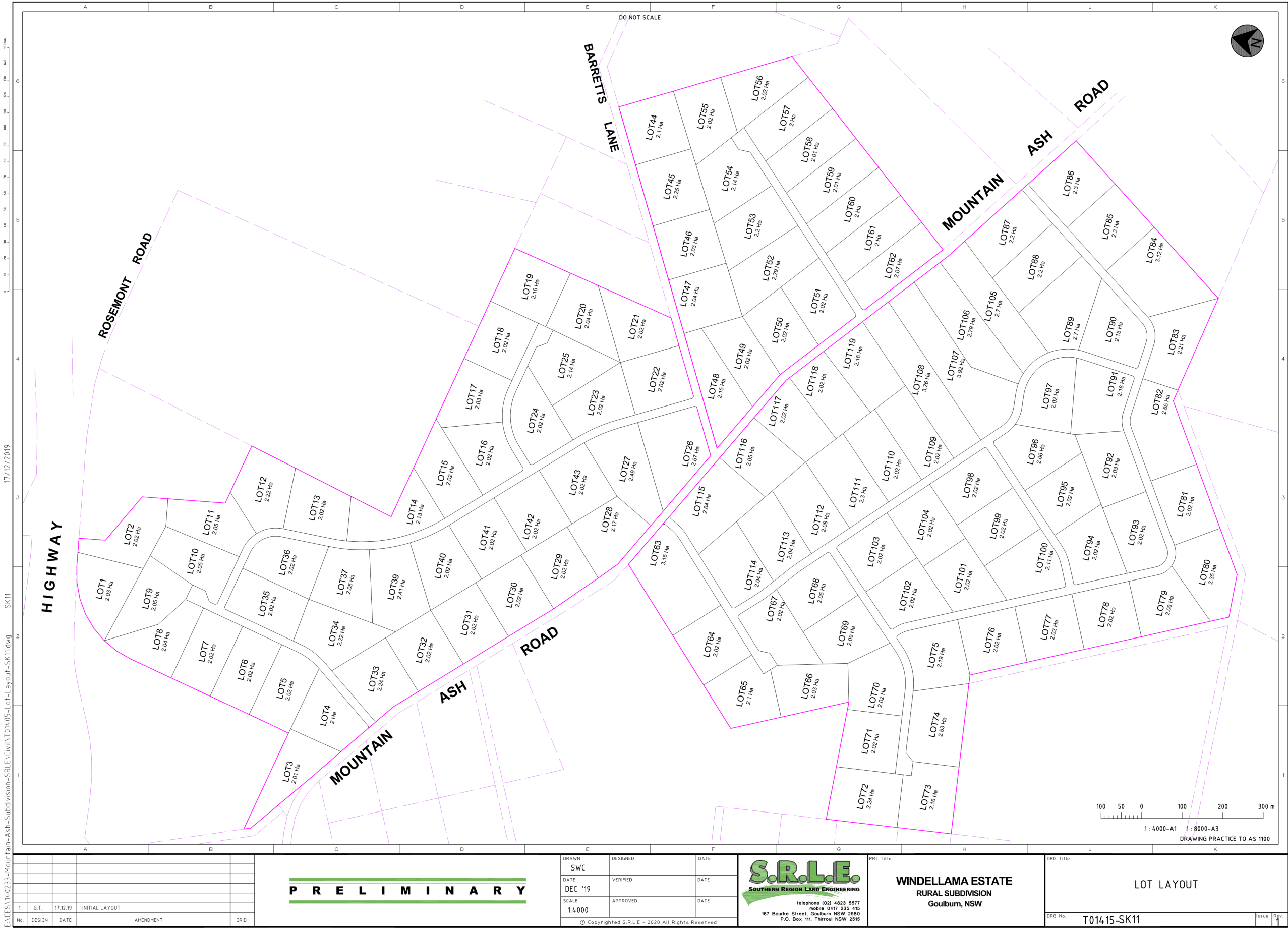
Appendix 1 Site Plans

Appendix 2 – Proposal Large Lot Residential Subdivision









APA Group ACN 083 009 278
Level 1, 121 Wharf Street
Spring Hill, QLD 4000
GPO Box 1390, QLD 4001
APA Group | apa.com.au



APA Ref: 442172

18 December 2019

The General Manager
Goulburn Mulwaree Council
Locked Bag 22
Goulburn NSW 2580

EMAIL OUT: submissions@goulburn.nsw.gov.au

Dear Sir / Madam,

RE: Submission on Revised Draft Urban and Fringe Housing Strategy

Thank you for your email dated 18 October 2019 advising of the revised Draft Urban and Fringe Housing Strategy (the Strategy) being placed on Public Exhibition until 18 December 2019.

APA understands the revised Strategy has been re-exhibited following feedback from submissions received during the original public exhibition period earlier this year. These revisions include additional consideration of land constraints for development in the urban investigation area in Goulburn and Mulwaree. The former being of particular interest to APA due to the area including APA's two (2) High Pressure Gas Transmission Pipelines (HPGTs) and associated Measurement Length (ML).

APA acknowledges the efforts Goulburn Mulwaree Council (Council) have undertaken to improve the Strategy in recognition of land constraints for development such as HPGT's. APA wishes to reiterate key comments in response to the revised Strategy seeking to benefit the Strategy development process including future residential rezoning (Planning Proposal) and future Development Control Plan amendments. APA's original submission remains relevant and this letter does not supersede that submission. A copy of APA's original submission is attached, for Council's ease of reference.

APA welcomes the inclusion of a 'gas pipeline' (single pipeline and centreline only) on the revised Strategy's constraints mapping and Part 3 of the revised Strategy (Precinct Opportunities and Constraints Analysis). The associated pipeline ML and Safety Management Study (SMS) in accordance with Australian Standards (AS2885) requirement have not been included or referenced.

As mentioned in APA's original submission (dated 19 February 2019) on the Strategy, this SMS is required to be undertaken due to the change in pipeline location class. The current stage of planning is an ideal time to complete this SMS. This is because development layouts can be changed and sensitive land uses can be identified.

APA prefers that an independent facilitator manage the SMS to avoid a perceived conflict of interest. APA's position is that the cost of the SMS and any necessary risk management measures (e.g. slabbing the pipeline) be the responsibility of the 'agent of change'. Completing an SMS at this stage ensures the SMS addresses the site as a whole and allows costs to be shared between various development proponents. The SMS process does not preclude typical urban development from occurring, and ensures it occurs in a manner which maintains the pipeline integrity and community safety in accordance with pipeline related legislation, regulations and standards.

APA Group comprises two registered investment schemes, Australian Pipeline Trust (ARSN 091 678 778) and APT Investment Trust (ARSN 115 585 441), the securities in which are stapled together. Australian Pipeline Limited (ACN 091 344 704) is the responsible entity of those trusts. The registered office is HSBC building, Level 19, 580 George Street, Sydney NSW 2000.

Page 1 of 2

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APA does not seek to unnecessarily inhibit future development proximate to our assets and is happy to work with Council and development proponents to achieve mutually acceptable and compliant outcomes. Any interested parties are strongly encouraged to contact APA early to discuss the process of integrating APA assets into future urban developments.

Please contact me on 0472 845 967 or planningnsw@apa.com.au should you wish to discuss the contents of this correspondence, or have any further queries.

Yours faithfully,



Phillip McCutcheon
Manager Urban Planning
Infrastructure Planning and Protection

Att: APA's submission (dated 19 February 2019) on the original Draft Urban and Fringe Housing Strategy

APA Group ACN 083 009 278
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Spring Hill, QLD 4000
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APA Ref: 442172

19 February 2019

Bennett Kennedy, Senior Strategic Planner
Goulburn Mulwaree Council
Locked Bag 22
Goulburn NSW 2580

EMAIL OUT: submissions@goulburn.nsw.gov.au

Dear Bennett,

RE: Submission on Goulburn Mulwaree Residential Housing Strategy

Thank you for the opportunity to review and provide comment on the *Goulburn Mulwaree Residential Housing Strategy* (the Strategy). APA has a keen interest in this Strategy given two of APA's pipelines run through the area. APA has recently established an Urban Planning Team that seeks to be involved early in planning processes to ensure that relevant issues are addressed at an appropriate stage (such as this strategy development process). APA appreciates the notice provided and opportunity to provide input.

This submission is structured in three parts. Firstly, background information is provided on APA, and our obligations in managing and operating high pressure gas transmission pipelines. This background is important to understand in relation to the submissions we are making. The second part contains specific submissions in relation to the document on public exhibition. Lastly is a summary of key points.

1. Background to APA and High Pressure Gas Transmission Pipelines

About APA

APA Group (APA) is Australia's largest natural gas infrastructure business and has direct management and operational control over its assets and investments. APA's gas transmission pipelines span across Australia, delivering approximately half of the nation's gas usage. APA owns and operates over 15,000 km's of high pressure gas transmission pipelines (HPGTs) across Australia.

The high pressure gas pipeline infrastructure plays an important role in:

- supplying energy needs to residential customers;
- supplying power generators; and
- providing energy needs to business and industry and thereby supporting economic activity in New South Wales.

APA owns and operates two pipelines that run in parallel north of the Goulburn and Marulan Town Centres. The two pipelines are located within an approximately 25m wide shared easement (see Table 1 for details):

APA Group comprises two registered investment schemes, Australian Pipeline Trust (ARSN 091 678 778) and APT Investment Trust (ARSN 115 585 441), the securities in which are stapled together. Australian Pipeline Limited (ACN 091 344 704) is the responsible entity of those trusts. The registered office is HSBC building, Level 19, 580 George Street, Sydney NSW 2000.

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Table 1: Transmission gas pipelines in the area of consideration

Pipeline	Pipeline Licence	Diameter (mm)	Measurement Length (m)
Moomba – Sydney Ethane Pipeline	15	200	590
Moomba – Wilton Natural Gas Pipeline	16	850	675
Note: measurement length is applied to either side of the pipeline.			

Both pipelines are centrally located in a north-east alignment through the Goulburn Mulwaree Urban Expansion Area. The Marulan Urban Expansion Area is partially located within the above pipeline MLs. For further detail refer to heading 'Measurement Length (ML) and Safety' below.

APA's statutory obligations

As a licence holder for HPGTPs APA has statutory obligations under the *Pipelines Act 1967 (the Act)*. The *Pipelines Regulation 2013* states a licensee must ensure the design, construction, operation and maintenance of a pipeline is in accordance with Australian Standards 2885 (**AS2885**).

APA also has a role to play in ensuring development compliance with Clause 66C 'Development adjacent to pipeline corridors' in Division 12A of SEPP (Infrastructure) 2007, which states the following.

(1) Before determining a development application for development adjacent to land in a pipeline corridor, the consent authority must:

- (a) be satisfied that the potential safety risks or risks to the integrity of the pipeline that are associated with the development to which the application relates have been identified, and*
- (b) take those risks into consideration, and*
- (c) give written notice of the application to the pipeline operator concerned within 7 days after the application is made, and*
- (d) take into consideration any response to the notice that is received from the pipeline operator within 21 days after the notice is given.*

In considering a development proposal or rezoning APA is obligated to ensure its pipelines are not damaged, nor subject to development which may increase the future risk of damage. Furthermore, APA must ensure the pipeline is designed to "reflect the threats to pipeline integrity, and risks to people, property and the environment" (AS2885, s4.3.1). Location classes which classify an area based upon the threats to the pipeline from land usage and the consequences for the surrounding population in the event of a loss of containment, are used to determine the appropriate pipeline design and management of an area. If the location class changes a Safety Management Study (**SMS**) is required to assess the additional risk and ensure the risk is reduced to an acceptable level. The primary location class for the two pipelines is Rural (R1) in the subject location. The proposed Strategy would change the location class for both pipelines to Residential (T1), and require an SMS to be undertaken.

Changes in land use may require that both procedural and physical controls be put in place to ensure new development is appropriately located and the pipeline is sufficiently protected in its new environment. These measures can be costly and require substantial forward planning. Therefore, it is in the interests of the plan makers and development proponents to communicate with the pipeline operator as early as possible in the planning process. The earlier that notice of planning proposals affecting APA's pipelines is provided to APA, the better the information available to address public safety and the better equipped planners and APA will be to design efficient and effective outcomes,

including ensuring safety near transmission pipelines both during development and after public settlement in the new areas.

Under AS2885, APA is not only responsible for activities or development on its easements but it also has responsibilities for managing the risks associated with land use well outside of the pipeline easements. This includes both increased risk of physical damage to the pipeline from development and ongoing land use activities, as well as the risk to surrounding development from a loss of containment. The two risks are related and are explained in more detail below under the heading 'Measurement Length (ML) and Safety'.

Measurement Length (ML) and Safety

In managing HPGTPs and considering land use changes APA must focus on that area geographically defined by the ML. The ML area is the heat radiation zone associated with a full-bore pipeline rupture. APA is mandated to consider community safety in the ML due to the high consequences of pipeline rupture to life, property and the economy. The ML is determined taking account:

- design criteria of the pipe (driven by the environment within which it was designed for at the time of construction), and
- Maximum Allowable Operating Pressure (**MAOP**) of the pipe.

Due to the factors above the ML can vary significantly, and in the case of the subject area the ML (maximum) is approximately 675m either side of the pipeline.

AS2885 requires APA to consider community and operational safety aspects in the event of a change in land use or significant increase in population density within the ML of the pipeline. This consideration is typically undertaken through a SMS. Where required, we strongly recommend Council, the proponent and APA coordinate to undertake this process so future land use and construction within the ML can be undertaken taking account of any identified safety considerations and in compliance with AS2885 and its enabling legislation.

The SMS process does not preclude development from occurring, but ensures it occurs in a manner which maintains the pipeline integrity and community safety. Typical recommendations of an SMS are improved physical protection of the pipeline through protective slabbing installed below ground and over the pipeline and excluding sensitive uses from the ML.

Sensitive Uses

APA seeks to limit sensitive uses from establishing within the ML to retain a high level of compliance with applicable safety standards. AS2885 defines a sensitive use as one which may increase the consequences of failure due to its use by members of the community who may be unable to protect themselves from the consequences of a pipeline failure.

To this end, APA's preferred position is that all land uses listed below be located outside of the ML:

- | | |
|------------------------|-----------------------------|
| • Child care centres | • Place of worship |
| • Detention facility | • Residential care facility |
| • Educational facility | • Retirement facility |
| • Function facility | • Service station. |
| • Health care services | • Shop |
| • Hospital | • Shopping centre |
| • Hotel | • Theatre |

While the issue of sensitive uses would be addressed in the SMS, it is suggested that the subsequent Development Control Plan include reference to the ML and restrictions on the location of sensitive uses within it.

Easement Management

APA is the beneficiary of a pipeline easement in which the subject pipelines are located. The following details on easement restrictions are provided for Council's general information.

To ensure compliance with the safety requirements of AS2885, APA needs to ensure our easement is managed to an appropriate standard. This includes:

- ensuring the easement is maintained free of inappropriate vegetation and structures (standard agricultural cultivation practices are permitted)
- place warning signs at various mandated points along the pipeline route, including any change in property description/boundaries
- maintain a constant line of sight between warning signs
- undertake physical patrols and inspections of the easement.

APA will not accept outcomes that do not enable us to achieve our safety responsibilities to the surrounding community. APA seeks to limit crossings of the pipeline easement and works within the easement. Any proposed works within the easement must only occur following assessment by APA, and authorisation through our Third Party Works process. This process will ensure all works are undertaken in a safe manner that does not physically affect the pipeline. Works within the easement include landscaping, changes in ground level, road/driveway crossings, and services crossings. APA will not allow roads running along the easement and any road crossings should be perpendicular to the easement and only as necessary to facilitate access.

Any party seeking to undertake works on property containing a pipeline, or are seeking details on the physical location of the pipeline, must contact Dial Before You Dig on 1100 or APA directly at APAprotection@apa.com.au.

APA does not seek to unnecessarily inhibit future development proximate to our assets and is happy to work with Council and development proponents to achieve mutually acceptable and compliant outcomes. Any interested parties are strongly encouraged to contact APA early to discuss the process of integrating APA assets into future urban developments. It should be noted that State and local government can access pipeline information via the Australian Pipelines and Gas Association which maintain an online mapping database from which data can be exported as an ESRI Shapefile or Google KML file.

This includes the measurement length for all APA transmission pipelines as well as other pipelines. Registration is available at <https://maps.landpartners.com.au/apd/APGALogin.aspx>.

2. Submission specifics

Inclusion of APA Pipeline and Easement within Goulburn Mulwaree Residential Housing Strategy

Overall, APA is generally supportive of the Draft Goulburn Mulwaree Residential Housing Strategy. However, it is considered that the Strategy would benefit from inclusion of commentary and mapping of APA's existing HPTGPs and easement within the study area. The following comments are provided for Council's further consideration.

- Figure 1 Urban Expansion Recommendations Goulburn
 - o Overlay APA's existing HPTGPs and easement.
- Figure 2 Urban Expansion Recommendations Marulan
 - o Overlay APA's existing HPTGPs and easement.
- Section 4.8.1 Criteria of identification of greenfield sites
 - o APA recommends inclusion of the following statement:
 - Development should minimise conflict and not result in fragmentation of existing high pressure transmission gas pipelines.
- Section 4.9 Constraints and Opportunities Assessment
 - APA recommends inclusion of commentary regarding high pressure transmission gas pipelines within Table 24 – Opportunities and Challenges as follows:

Item	Challenge	Opportunity
High Pressure Transmission Gas Pipelines	Development of residential land within the Goulburn Investigation Area and Marulan Urban Expansion Area needs to consider the location and measurement length of existing high pressure transmission gas pipelines.	High pressure transmission gas pipelines could offer opportunity for significant open space, attractive landscaping (within easement guidelines) and active travel.

Requirement to complete SMS

The development envisaged under the Strategy would change the land use classification around the pipelines and therefore trigger the need for an SMS. In essence, the pipeline has been designed for a rural environment where the risk of damage to the pipeline is low and the consequence of a full bore rupture is also relatively low. The proposed change in land use significantly increases the risks. Therefore, these risks must be examined and measures put in place to reduce the risks to acceptable levels.

The current stage of planning is an ideal time to complete an SMS. This is because development layouts can be changed and sensitive land uses can be identified.

APA prefers that an independent facilitator manage the SMS to avoid a perceived conflict of interest. APA's position is that the cost of the SMS and any necessary risk management measures (e.g. slabbing the pipeline) be the responsibility of the 'agent of change'. Completing an SMS at this stage ensures the SMS addresses the site as a whole and allows costs to be shared between various development proponents.

Preferred treatment of easement – residential areas

APA has commercially acquired easements to facilitate both the development of pipelines and their ongoing maintenance (as required under AS2885). Easements typically allow width required for complex pipeline works and maintenance, whilst also allowing for additional pipelines if required in the future.

The utilisation of the easement as a linear open space reserve with limited embellishment held in single title is the preferred outcome. This can have a road abutting as is traditional with open space outcomes. This outcome provides the greatest protection to the pipeline while providing the opportunity for significant open space, attractive landscaping (within easement guidelines), and active travel.

APA will no longer accept roads over our easements (excluding periodic perpendicular crossings) as a matter of principle for the following reasons:

- APA easement gets extinguished and therefore APA loses all the attached contractual rights for no benefit
- there is no agreed mechanism in the place with Councils to provide for the maintenance of APA's easement rights within road reserves in the absence of the easement
- APA will need Council approval to access the asset in the future or to undertake any duplication/augmentation
- additional cost of accessing the asset and making good when in a road reserve
- community disruption in having to close a road when accessing infrastructure
- the number of 3rd parties that also utilise road reserves (water, power, etc.) and the additional extent of high-risk works over, under and around the high pressure gas transmission pipeline
- the removal of the easement leaves APA to rely on legislation to provide rights to access the pipeline which is a significantly reduced area than currently provided for by an easement
- access aside, the loss of easement puts future works such as pipeline duplication or looping at significant risk as APA no longer has legal rights to the land in which such works would take place.

All the above significantly increases the risk profile of the pipeline, adds avoidable complexity to APA's compliance requirements under pipeline related legislation and standards and unnecessarily jeopardises APA's future ability to continue to meet increasing community demand for gas. For all the above reasons, APA will seek that urban development, particularly roads running along the easement, be avoided and such infrastructure be located outside the easement.

Where roads are required to cross an existing APA easement (perpendicular), we will consent in principal (subject to detailed assessment) on the basis that Council enters into agreement with APA to maintain our legal/commercially obtained easement rights in the area covered by the road. This is similar to agreement entered into with any other party requiring easement crossings (utility operators for example).

APA will also not accept the pipeline running through urban residential lots. This fragments the easement, creates significant issues for maintenance of the easement, prevents visual line-of-sight checks, and facilitates inappropriate encroachments on the easement (e.g. swimming pools, sheds, etc.). APA may consider limited areas of rural residential type allotments (minimum lot size 5 ha) with the easement well clear of defined development footprints.

3. Summary

As a licence holder of HPGTPs APA has significant statutory obligations. This is the key driver for APA in seeking the outcomes outlined in the submission. APA is not opposed to urban development around its pipelines, but seeks to ensure it meets its statutory obligations and contributes towards good urban outcomes. APA appreciates that the subject site presents a number of constraints, and is willing to work with Council to achieve the best possible Strategy and DCP outcomes. The Strategy has the potential to compromise the integrity of the pipeline and community safety around the pipelines and APA seeks changes as outlined in this submission.

A key step which is required to facilitate the proposed land use change is a SMS. APA is willing to participate in an SMS, and can provide a list of potential facilitators. The recommendations of an SMS would provide both APA and development proponents with the necessary assurances under AS2885 for urban development to advance. Associated costs should be borne by the 'agent of change'.

APA's preferred easement treatments are of paramount importance to maintaining pipeline integrity and community safety. These outcomes must be incorporated into the Strategy and supported by the DCP. Sensitive uses should not be located within the ML and this should also be reflected in the Strategy and supported by the DCP.

APA thanks Goulburn Mulwaree Council for the opportunity to comment on the *Goulburn Mulwaree Residential Housing Strategy* and seeks to have continuing involvement as the process continues, including involvement in the associated LEP and DCP. APA would welcome the opportunity to discuss the contents of this submission in a meeting with Goulburn Mulwaree Council, if required to clarify any issues and advance the strategy development process.

Please contact Ben Setchfield on 07 3223 3385 or email planningnsw@apa.com.au to further discuss the contents of this correspondence.

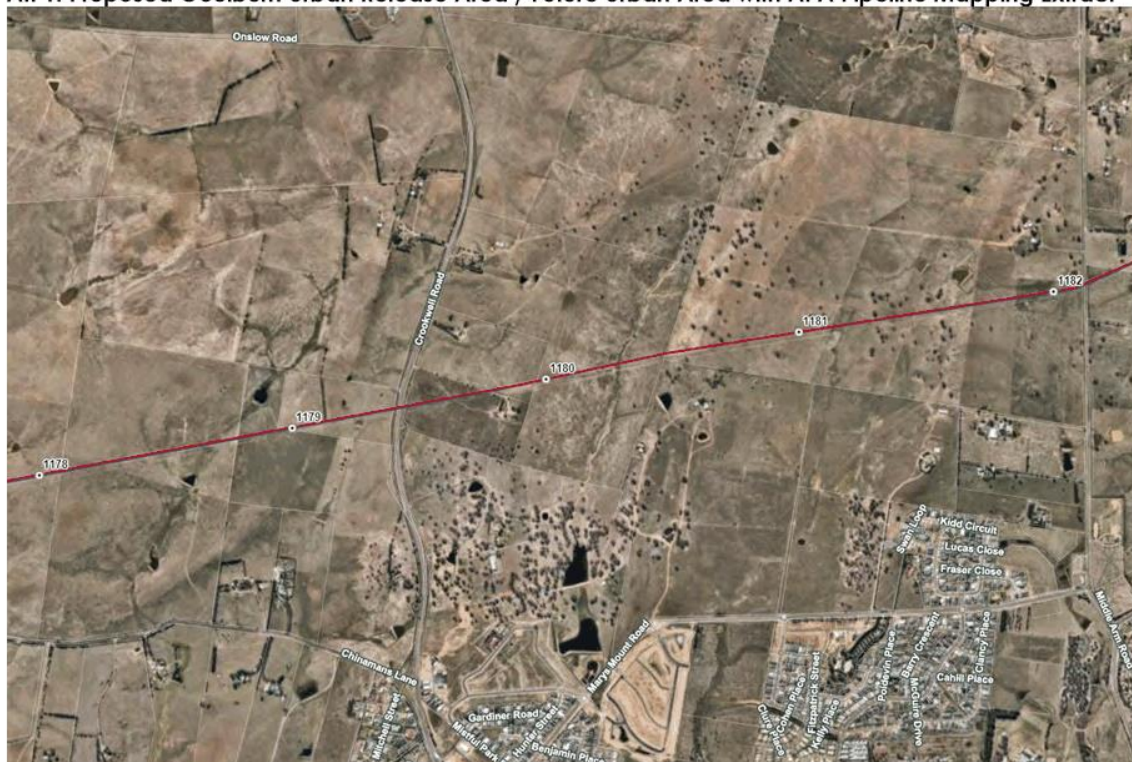
Yours faithfully,



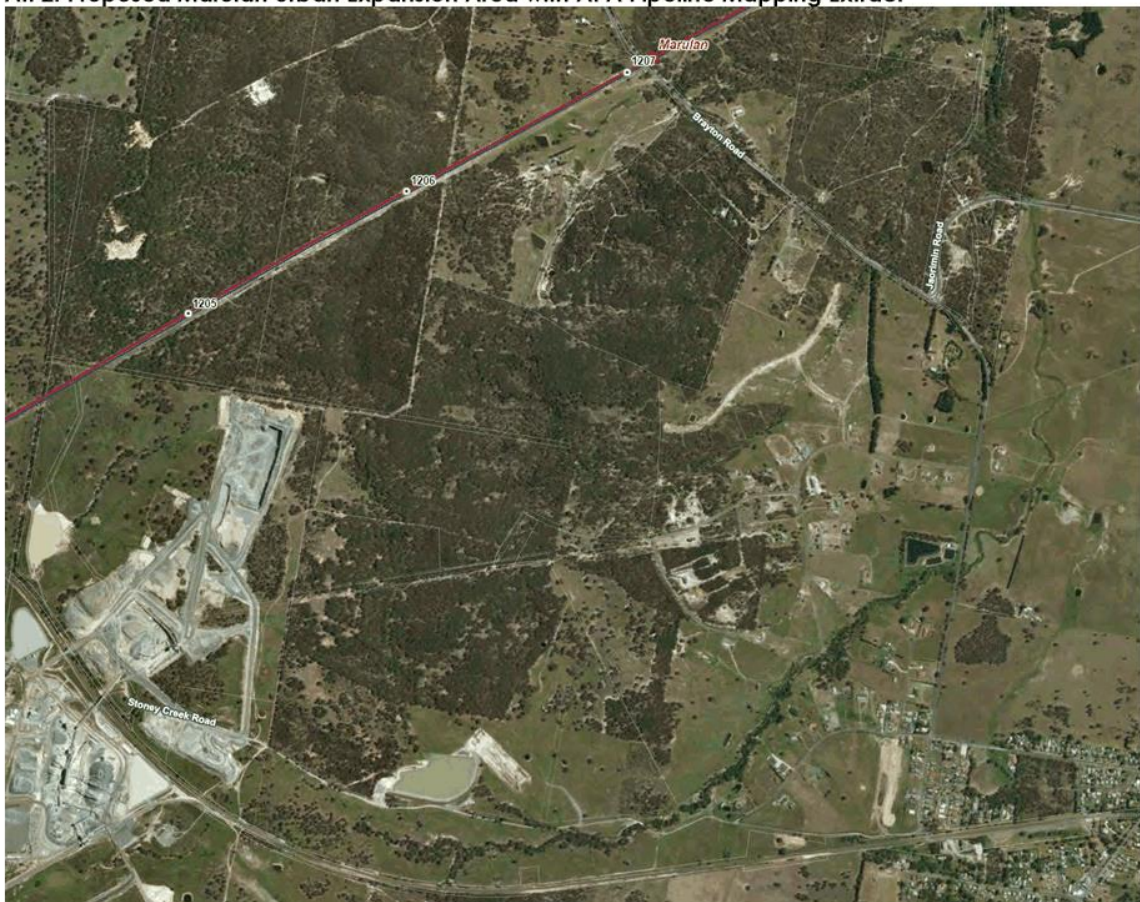
Ben Setchfield
Senior Urban Planner
Infrastructure Planning and Protection

Att: Proposed Study Areas with APA Pipeline Mapping Aerial Extracts

Att 1: Proposed Goulburn Urban Release Area / Future Urban Area with APA Pipeline Mapping Extract



Att 2: Proposed Marulan Urban Expansion Area with APA Pipeline Mapping Extract





10 January 2020

The General Manager
Goulburn Mulwaree Council

Via email: submissions@goulburn.nsw.gov.au

Dear Sir/Madam,

**Gunlake Quarries Pty Ltd – The draft Urban and Fringe Housing Strategy
dated 18 September 2019 Submission**

Gunlake Quarries Pty Ltd (Gunlake) would like to thank Goulburn Mulwaree Council (GMC) for the opportunity to comment on The draft Urban and Fringe Housing Strategy (updated draft GMHS) that has recently been placed on Public Exhibition on 18 September 2019 in response to comments made in the initial public consultation period.

Gunlake believes that all the matters raised in its submission dated 1 March 2019 are still relevant and have not been satisfactorily addressed and evaluated by GMC.

Background

Gunlake is an independent family owned, wholly Australian company that owns and operates a State Significant hard rock quarry at Marulan, NSW with approval to supply up to 2 million tonnes per annum of quality construction materials into the Sydney and regional markets and with a resource in excess of 100 years.

The Gunlake Group also includes Gunlake Concrete Pty Ltd, a Sydney based concrete manufacturer that has grown to become the largest independent concrete supplier in NSW.

As an independent owner and quarry operator, we are very concerned at certain aspects of the updated draft GMHS, such as the lack of identification of State Significant quarrying operations and their associated transport routes, and the protection of such resources from ever encroaching conflicting land uses.

The Gunlake Marulan quarry workforce currently exceeds 45 local on-site full-time employees, plus an additional 90 indirect jobs, associated haulage contractors or local & regional companies that provide ongoing services to the company.

We are a significant and growing local employer and will be so for many generations to come.

Head Office:
Level 2, 53 Cross Street
Double Bay NSW 2028
Ph: 02) 9363 1744

NSW State Significant Extractive Industries

The NSW State Environmental Planning Policy (Mining, Petroleum Production and Extractive Industries) 2007 (SEPP 2007) was implemented to facilitate the development of land containing extractive material resources including their associated transport routes, further the SEPP 2007 specifically states that any determination of development in the vicinity of an existing extractive industry must consider whether or not the development is likely to have a significant impact on the extraction or recovery of extractive materials.

Extractive industries are a significant contributor to state, local and regional economic activity and development. Given they are limited in occurrence and geologically finite, the identification, protection and utilisation of extractive resources and their subsequent transport routes, are an important consideration when land use planning decisions are made.

It is imperative that this strategy delivers tangible outcomes for the identification and protection of extractive industry operations, reserves and the associated transport routes from future urban encroachment and sterilisation.

Whilst the updated draft GMHS has now recognised the existence of Gunlake as a State Significant extractive industry operation to the north of the town of Marulan, it has still failed to identify and afford it protections stipulated in the SEPP 2007, Ministerial Directions and Councils DCP.

Marulan has been identified as the major ongoing and future region to provide the vast majority of the supply of construction materials to the Greater Sydney Region. For this reason alone the SEPP 2007 should be the key planning policy to which the updated draft GMHS is based upon, from both social and economic perspectives.

NSW Ministerial Directions

The updated draft GMHS has been prepared with adherence to Ministerial Directions, a key and essential element being to ensure that:

"the future extraction of State or regionally significant reserves ofextractive materials are not compromised by inappropriate development."

The updated draft GMHS has failed to identify how the Gunlake Quarry, which includes its associated transport route, will not be compromised by inappropriate development. This failure is evident in Figure B below where no "Constraint buffer" has been identified on the Gunlake transport route.



GMC has undertaken initial consultation with many government agencies with Direction 13 again raised by the Department of Planning, Industry and Environment (NSW DPIE), in regard to the management of the ongoing use of mineral resources.

The updated draft GMHS, if adopted, would allow urban and residential development north of Marulan toward the Gunlake Quarry and would be in direct contradiction to the SEPP 2007, NSW Ministerial Directions and the NSW Regional Plan.

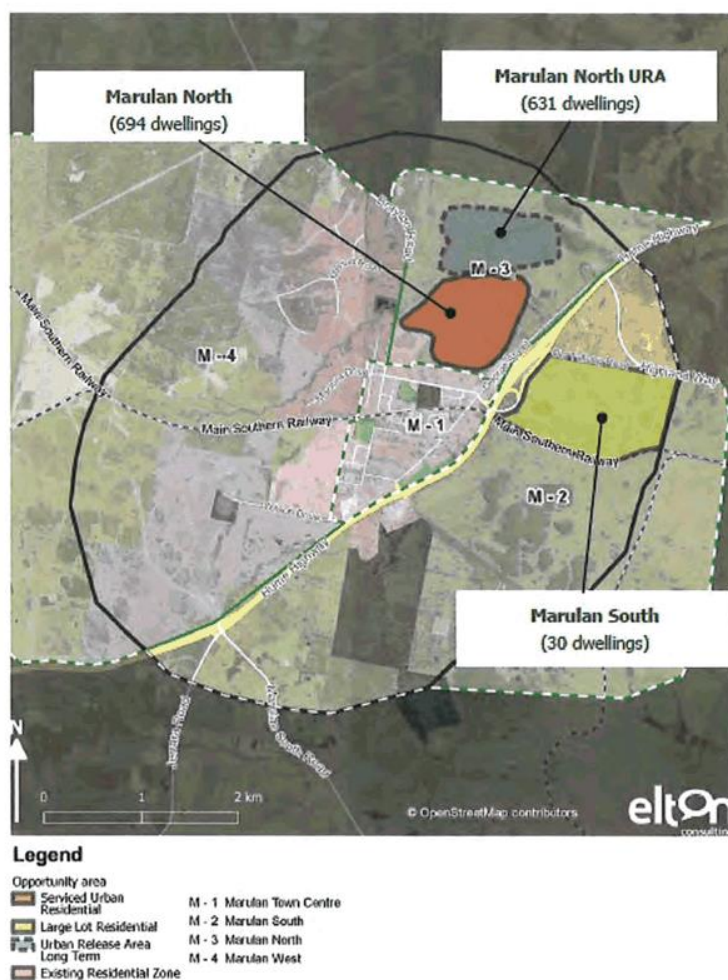
The draft Urban and Fringe Housing Strategy dated 18 September 2019

Given the long-term nature and implications of decisions made today, the interaction between State Significant Extractive Industries and the updated draft GMHS is critical. Whilst the updated draft GMHS has now identified the Gunlake Quarry, which is recognised by NSW as a State Significant resource, it has failed to provide appropriate protections against conflicting land uses.

A land use conflict will eventuate should GMC adopt the updated draft GMHS in its current form. As outlined in Figure D below, Precinct Opportunities for Development-Marulan there is a large-scale residential development proposed directly adjoining and potentially accessing a 24-hour, 7 day a week approved State Significant transport route.

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Figure D Precincts and Opportunities for Development - Marulan



Ambrose Road (from Brayton Road to Red Hills Road), was built and constructed by Gunlake Quarries Pty Ltd, as a route to bypass the village of Marulan and keep the vast majority of quarry traffic out of, and completely avoid residential areas. The construction of Ambrose Road as a bypass road did not arise from any requirement or identified need in any planning documents or draft instruments. More over Gunlake proactively made that provision to increase the amenity of the village of Marulan. Allowing residential areas to now encroach onto the Gunlake Quarry transport route would negate what is currently a significant public benefit.

This transport route is now approved (by an SSD consent in June 2017) for a daily maximum of 490 truck movements per day. The SEPP 2007 requires that any development in the vicinity of the quarry or its transport route must consider its impact on the ability of the quarry to extract or recover its resource. If residential areas were to encroach on the transport route there would be considerable land use conflicts that would sterilise a State Significant resource.

Goulburn Mulwaree Section 94 Contributions Plan 2009

Further to this issue the Goulburn Mulwaree Section 94 Contributions Plan 2009 also makes provision for proponents and operators to upgrade roads at their own cost (for both road design and road safety), as is the case with Gunlake Quarries. They are also required to pay Section 94 contributions to Council for road maintenance, resulting in hundreds of thousands of dollars every year for each operation.

As well as constructing the transport routes they are also required to pay to maintain them on an ongoing basis. The updated draft GMHS now purports to support these transport routes (paid for and maintained by extractive industries) as accesses for urban and residential development.

The correct mapping and protection of State Significant sites and key transport routes for the movement of construction materials in the short and long term must be a key element and policy outcome in this strategy.

Any Council strategy to establish residential development in the vicinity of an existing State Significant extractive industry will be in direct contravention of the SEPP 2007 as it can only result in a significant impact on the extraction or recovery of extractive materials in both the short and long term.

Updated draft GMHS Urban Expansion Recommendations

The updated draft GMHS has identified a requirement for the following:

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5.2.2 Marulan

It is expected that Marulan will continue to grow as projected. If an assumed 355 dwellings are required to meet the estimated demand, around **53 hectares** of residential zoned land is required. Marulan currently has around 20 hectares of undeveloped residential land. The land requirement for additional serviced land is **38 hectares** across the life of the Strategy to 2036.

It assumes that 53Ha of land is required to provide for 355 dwellings at a ratio of 6.7 dwellings per hectare. It also states that 20Ha of the 53Ha required exists now, but then states that an additional

38 Ha is required, presumably to make up to the total of 53Ha. We presume that this is an error and that the additional land required to make up the overall 53Ha is in fact 33Ha.

So why if only 33Ha of additional residential land is required, as per Councils figures at a very low ratio of 6.7 dwellings per Ha, has Council identified and supported 246.57Ha of future residential land. This is over seven times the requirement and will lead to substantial land use conflict if implemented, as per Figure D above.

Additional Residential and Large Lots Marulan

Marulan	Area Identified (ha)	No. Dwellings /lots*	% total new dwellings	Priority*	Years Supply
Serviced Residential					
3 Marulan North	86.81	694	96	Medium/Long	35
Consider staged approach, rezone with an Urban Release Area and Concept Plan to deliver 2ha lots in the short term and re-subdivide in the future					
Large Lot Residential*					
2 Marulan South	85.5	30	4	High	1.5
Sub-Total	172.3	724	100		
Urban Release Areas Long Term (beyond 2036)					
3 Marulan North	74.26	631	100	Long	32

* Priority is - Short term/High 12 months, Medium 5-10 years, Long 10 years plus. Timeframes may vary as priorities change in response to growth

Many of the Marulan urban expansion recommendations will have direct access to, or from an extractive industries State Significant 24-hour, 7-day transport Route. Gunlake Quarries strongly objects to this, and it is in direct contravention with the SEPP 2007, NSW Ministerial Directions and the NSW Regional Plan.

Any access to future residential land should avoid transport routes completely.

The updated draft GMHS should provide access to such areas from the old Hume Highway close to the Marulan intersection with the Hume Highway providing both North and South access for vehicles. This is by far the most efficient access which exists now, is rarely used and would provide an excellent access and egress point to future residential land that has been identified in the draft GMHS.

Updated Draft GMHS Land Use Controls

A key principle of the updated draft GMHS Settlement Planning principles below is:

"protecting areas that contain important resources and minimising the potential for land use conflict."

Settlement Planning Principles

Local housing strategies focus on urban areas where residents can access services, jobs and transport. Some strategies will need to acknowledge connections to Canberra as a location for higher-order services and employment.

Decisions around the most suitable locations for new housing must consider the compatibility of land uses, as well as the availability of road connections and service infrastructure. Other considerations include:

- » avoiding or mitigating the impacts of hazards, including the implications of climate change;
- » protecting areas with high environmental value and/or cultural heritage value and important biodiversity corridors;
- » identifying a sustainable water supply;
- » protecting the region's water supply and the environmental qualities of rivers and streams;
- » considering the impact of aircraft noise;
- » protecting areas that contain important resources and minimising the potential for land use conflict;
- » protecting important agricultural land to capitalise on its potential to produce food and fibre now and in the future; and
- » identifying and designing new neighbourhoods so they are environmentally sustainable, socially inclusive, easy to get to, healthy and safe.

The strategies should be consistent with Settlement Planning Principles that align with the Memorandum of Understanding between the NSW and ACT Governments. These will be complemented by guidelines for local housing strategies that will assist councils when undertaking local strategic planning²

Again, the "Use" section addresses the fact that there should be no disturbance or conflict with State Significant Quarry Areas.

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	Challenge	Opportunity
Social infrastructure	As the population of Goulburn and Marulan Grow it will apply pressure to existing social infrastructure. Education, child care, health and support services be supported relative to new development and growth in population. Additionally, social cohesion and resilience is a critical matter to manage particularly in large greenfield suburbs. Communities that are rapidly developed should be supported to establish and build social connections	As the population grows so too does the community. Growth will further support investment in education, training, events and health. Further growth will also support the attraction and retention of higher order services. This is particularly important to health care industry and service providers.
State Significant Quarry Areas	Development of residential land in Marulan needs to consider location and buffers to State significant quarry areas.	State significant quarry areas could offer logical and physical constraints which limit the opportunity for urban sprawl.

Gunlake objects to any proposed urban development strategy that advocates urban development move north from Marulan towards the Gunlake State Significant resource as it will cause significant long-term land use conflict.

The following issues should also be included in any site selection criteria for current & future residential/urban release areas:

1. Any new development must undertake Noise Impact Assessments taking into account existing operations and land uses and must demonstrate that the development does not cause a breach of the relevant noise criteria of existing uses.
2. Road Traffic Noise Impact Assessments for each release area showing that the design of the proposed urban release area will not affect the ongoing and future use of the 24-hour, seven day a week State Significant transport route. Once completed they should then be placed on exhibition for review and comment.
3. These noise impact and road traffic noise impact assessments should show the extent of buffers, landscape, screening, general noise attenuation measures that should be built into each release area from the outset of urban planning, therefore reducing the risk of future land use conflict with that urban area.

4. From this process there should then be a list of constraints and setbacks, subdivision design, Lot densities and yield, including building and construction methodology, building envelopes which should be built into the LEP/DCP and consent conditions for the subdivision/urban release area and enforced by legislation.
5. GMC should enforce the notification of State Significant 24 hour, 7 days a week transport routes and mineral resources/extractive industry sites on all new land titles issued via the use of Section 149 Certificates/Notices.
6. All vehicle entry/exit points to urban release areas should go through a full AUSTROADS detailed design process and engineered to full AUSTROAD standards and guidelines. This should also include as a minimum:
 - i. A Road Safety Audit (Stage 3 – Detailed Design)
 - ii. A Road Safety Audit (Stage 4 – Pre-Opening), with any issues resolved prior to road opening and practical completion.
 - iii. Post operation Road Safety Audit review.

The updated draft GMHS should ensure that adequate and failsafe planning principles, policies and controls are put in place prior to any approval being given for any residential development. This should include extensive and detailed consultation and engagement with extractive industries (and other industry and heavy haulage operators) so that the problems and issues are addressed and resolved prior to them occurring.

Another critical aspect of such a policy is to adequately inform the local and wider areas of any development proposals that are taking place. Very often notices are only sent to a very localised area around a development which can lead to completely inappropriate developments being approved, which later cause major land use conflict,

Communication of all proposals and developments to a wider area is a critical component of this draft GMHS, as is the case with the extensive consultation and notification required in all State Significant Development.

Conclusion

The updated draft GMHS should adopt a precautionary, conservative and prescriptive approach to any plans for residential development, not only to existing extractive industry operations but also to the protection of State Significant resources currently not operating but identified, to which the NSW DPIE and Department of Mineral Resources should be closely consulted. The use of Section 117 directions (or similar) to ensure protection of such areas should be fully utilised, as once these areas are lost to land use conflict they are gone forever.

Quarries are a significant contributor to state, local and regional economic activity and development. Given they are limited in occurrence and geologically finite, the identification, protection and utilisation of extractive resources and their subsequent transport routes are an essential consideration when land use planning decisions are made.

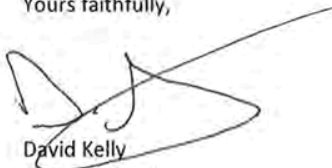
The State Environmental Planning Policy (Mining, Petroleum Production and Extractive Industries) 2007 was implemented to facilitate the development of land containing extractive material resources further the SEPP 2007 specifically states that any determination of development in the vicinity of an existing extractive industry must consider whether or not the development is likely to have a significant impact on the extraction or recovery of extractive materials.

The updated draft GMHS has now recognised that Gunlake is a State Significant extractive industry operation to the **NORTH** of the town of Marulan and any assumptions or protection afforded to those extractive industry operations to the south and south west should automatically be afforded to the north, which will affect the basis of the current draft GMHS and its plan to rezone land to the north of the town.

Gunlake Quarries strongly objects to the updated draft GMHS and believes that it is in direct contravention with the NSW State Environmental Planning Policy (Mining, Petroleum Production and Extractive Industries) 2007, NSW Ministerial Directions and the NSW Regional Plan. The updated draft GMHS should not and cannot be approved in its current form.

We also request that we be advised when the report on the updated draft GMHS is scheduled to be presented to Council so that we can register to speak at the Public Forum section of that meeting.

Yours faithfully,



David Kelly
Head of Development

**Draft Urban Fringe Housing Strategy Submission
Goulburn Mulwaree Council**

24 January 2020

By email: submissions@goulburn.nsw.gov.au

Mr & Ms Weir
70 Gurrundah Road
PO Box 601
Goulburn NSW 2580

Warwick Bennett
General Manager
Goulburn Mulwaree Council
184-194 Burke Street
Goulburn NSW 2580

Mr D Long
2 Gurrundah Road
Goulburn NSW 2580

Dear Mr Bennett

Goulburn Mulwaree Urban and Fringe Housing Strategy Consultation Submission

Thank you for the opportunity to lodge this submission associated with the revised version of the Draft Urban and Fringe Housing Strategy (the Strategy). This a joint submission and our submission relates to the western urban fringe of Goulburn in the Run-o-Waters/Baw Baw locality, in particular, Lot 13/DP573773 (70 Gurrundah Road) and Lot 364/DP750015 (2 Gurrundah Road).

A request for consideration of rezoning was submitted to Council in 2010 in relation to the land at 70 Gurrundah Road Goulburn NSW, and a submission was lodged in response to the first version of the 'Urban and Fringe Housing Strategy' in which the land was identified as 'Site 22.'

We would like to propose that the above referenced allotments (forming our proposed development site) are given appropriate Council consideration for use as an environmentally sustainable residential development area in the **short to medium term**.

We have considered the strategic context and the physical characteristics of our land and have determined that when the site is developed in an appropriate manner, it would provide Goulburn with its first environmentally sustainable residential development. Such developments are increasingly being sought as it is now recognised that such 'Green Certified' homes are a better long term investment than your average new Australian home.

Still, Australia has only a handful of such residential sustainable developments and our proposal could provide the first such development in regional NSW and an exciting addition to the existing urban footprint of Goulburn.

We bring to your attention, the 'Goulburn Mulwaree Strategy 2030' which identified the area to the west of Goulburn, as an appropriate area to accommodate large lot residential development, which would provide alternative residential product to the primary focus area of development at Mary's Mount and a reinforcement of a transition in land use from urban to rural. The 2030 Strategy recommends a minimum lot size of 2000sqm for allotments with water and sewer and 10 hectares for lots without water and

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Goulburn NSW 2580

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sewer. Our site is currently serviced with reticulated water but not sewerage; however, land immediately adjacent to our site currently has a 2ha MLS and is **not serviced** with reticulated water. It is noted that another submission to the Strategy proposes a new large lot residential development with a 2000 sqm MLS on this land adjacent to our site. That proposal does identify the need for the provision of water and sewer services to their proposed development.

On the basis of our understanding of Strategic documents released by Council over the past decade including the first draft of the 'Urban and Fringe Housing Strategy', our focus has been on identifying for Council, the suitability of our land at 70 Gurrundah Road for large lot residential development consistent with existing nearby lots.

However, since our first submission to Council in 2010, the surrounding area has been progressively urbanised, particularly over the past few years, and it has become apparent that Council and the Strategy identifies that the location of our proposed development offers a strong logical and contiguous extension to the existing neighbouring urban zoned land and could contribute to satisfying the growing demand for urban residential housing.

This submission responds to the Pre-strategy consultation at Stage 2 of the strategy development. As Council looks to sustainably house 5700 more people over the next 20 years our site (2 and 70 Gurrundah Road) offers a logical and appropriate location for environmentally sustainable residential housing in the **short to medium term**. The first stage of our proposed development would provide an initial housing yield of 170 detached homes on 700sqm minimum lot sizes. The Strategy cites that the Baw Baw precinct is "**most suitable**" for a serviced residential development with a projected yield of 941 houses. However, the Strategy attaches a long term timeframe to development in this area on the basis that it poses a risk of fragmentation of the area. This rationale is not consistently applied on a merit basis as evidenced by the application of a "high priority" status for the proposed development of the land adjacent (less than 50 metres distance) to our proposed development site.

The site

The land is located west of the Goulburn Urban Area and is defined as Lot 13/573773 and Lot 364/DP750015. The total area of these two sites is 25.64ha.. Access to the site is directly via Gurrundah Road. The site is gently sloping and connected to water, electricity and gas.

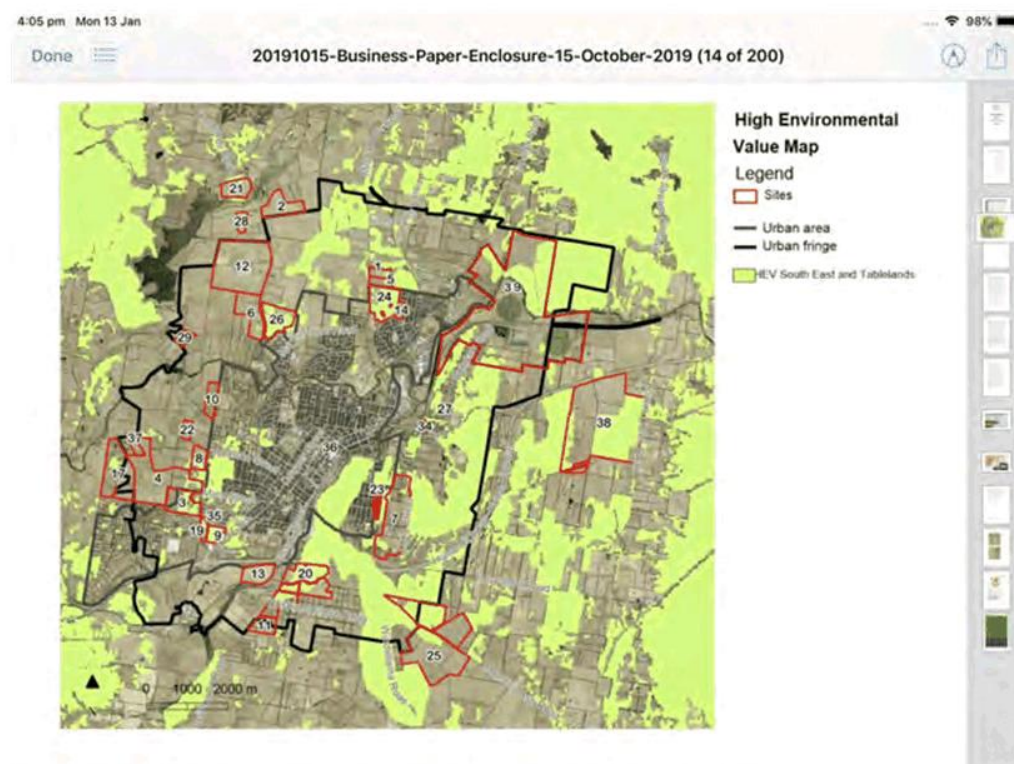
NB: The following map identifies land with a high environmental value:

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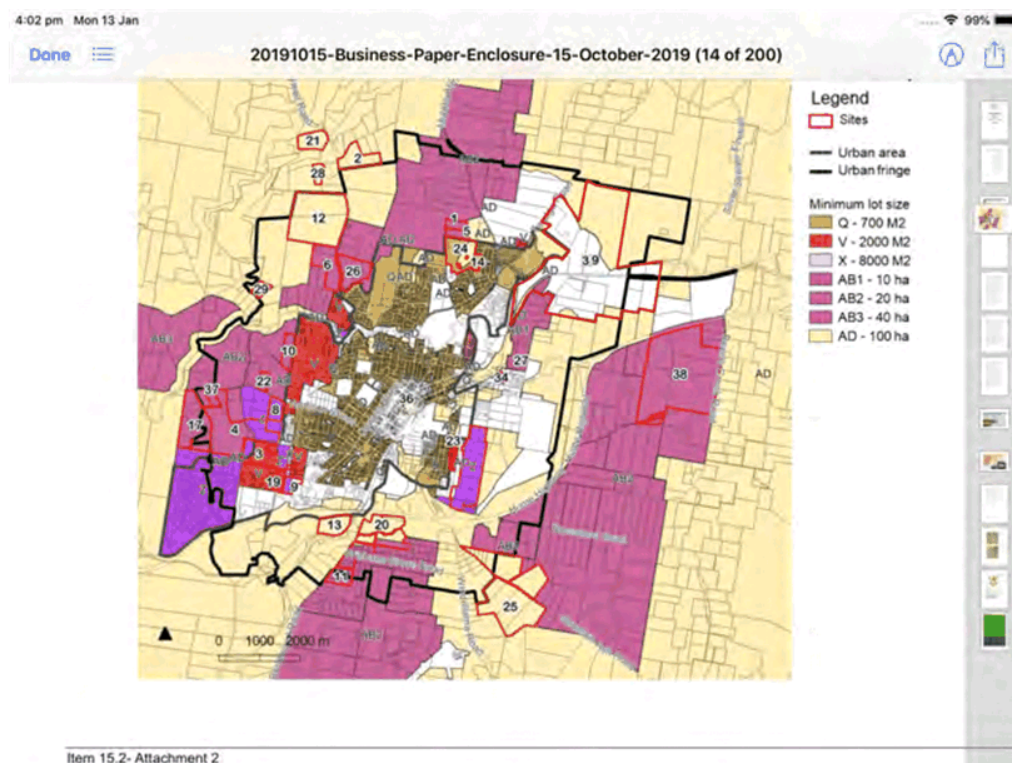


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Item 15.2- Attachment 2

The land is currently used for Agriculture (beef cattle) and detached residences. The land's productive capacity has been extensively constrained over the past decade by nearby residential development and will be further impacted if Council approve the expansion of the existing large lot residential in the 'Run-O-Waters' location directly adjacent to our site and further west on Gurrundah Road.

The land has been historically used for grazing, however, the increasing constraints associated with nearby development have resulted in such endeavours now being non-economic and a small number of cattle are retained on the land to reduce bushfire load that can pose a threat to the fringe of the city.

Current planning provisions

The site is subject to the provisions of the Goulburn Mulwaree Local Environmental Plan 2009 (LEP 2009) and is zoned RU6 Transition Zone.

The Lots comprising the proposed development site are currently subject to a minimum lot size (MLS) of AB1 (10ha). This submission seeks the opportunity to undertake a residential subdivision of the subject land in the short to medium term as part of the proposed determination of the Goulburn Mulwaree Urban and Fringe Housing Strategy,

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and it is assumed that this will be followed by a subsequent amendment to the Goulburn Mulwaree LEP.

Proposal

Below is a summary of the primary elements of our proposal.

- Lot 13/DP573773 and Lot 364/DP750015 to be considered under the Strategy as a site for future (short to medium term ie:2-5 years) environmentally sustainable 'Green Certified', residential development. While it is recognised that proposed allotment sizes would be subject to further land capability and infrastructure capacity analyses, we propose that the minimum lot size for both allotments be amended to 700sqm.

Such an amendment is consistent with Council's previous statements on the best use of the subject land as outlined below and is consistent with the recommended future development of the land and precinct as cited in the revised Urban and Fringe Housing Strategy.

Relevant Background informing this joint submission

1981 - Lot 13/DP573773 purchased when the land was located in Mulwaree Shire.

2008 – Goulburn Mulwaree Council review of Rating Category for Lot 13/DP573773

2009 – Rating category determination – 'Residential – General' from Rural – Farmland

2010 – Submission lodged in response to Amendment 2 to GMC LEP 2009 – Draft 'Rural Lot Size Development Areas'

2011 – Council rejected the request for rezoning/ reducing the minimal lot size of the land to 2ha (consistent with changes to MLS of adjacent land).and cited the following reasons for this decision:

a. Lot size of 10 ha MLS to be retained to be self-sufficient in water and sewer infrastructure and to protect any environmental elements. NB: Our land was serviced with reticulated water but all adjacent land did not have reticulated water and still does not have reticulated water or sewer but is again being proposed for a reduction in Lot size from 2ha to 2000sqm.

b. The subject land drains north to the river whereas the adjacent land drains to the South East. NB: this is totally incorrect as the adjacent land drains to the west as does the majority percentage of our land. Subsequent to this decision, land directly to the north of our land and directly beside the river, has now been developed to low density housing lots.

c. The main reason for rejection of request was stated as "the locality's close proximity to the City and similar existing developments".

d. Council recommended making representation again in 2014 when a general review of the LEP 2009 was planned.

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Goulburn NSW 2580

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24 January 2020

2019 – Submission lodged in response to the first version of the Draft Urban and Fringe Housing Strategy which identified our land as Site 22. Within that document, ecological constraints were identified as the main constraint for future development, however, it has now been established that the ecological study that informed the map, was only a desk-top study and was out-dated. It is noted that a newly revised map identifies minimal ecological constraints on the land. This is consistent with our own knowledge of the ecological constraints based on expertise engaged by us to ascertain the evidence supporting any such constraints.

Furthermore, the subject land, despite the erroneous first map of ecological constraints is identified as more suitable for low density serviced residential development. The priority for development, however, is extremely low (post 2036) on the basis that the land is constrained by lack of proximity to key services and reticulated water, sewerage and road and transport infrastructure. This statement is mostly inaccurate and is addressed elsewhere in this submission.

Documents considered informing this Submission:

- Goulburn Mulwaree Draft Urban and Fringe Housing Strategy Version 1
- Goulburn Mulwaree Draft Urban and Fringe Housing Strategy Revised Version
- Goulburn Mulwaree Local Environmental Plan 2009, Urban Release area, Land Zoning, Minimum Lot Size Maps, Biodiversity Maps
- Goulburn Mulwaree Development Control Plan
- State Environmental Planning Policies (SEPP's)
- Goulburn Mulwaree Strategy 2020
- Goulburn Mulwaree Biodiversity Strategy
- South East and Tablelands Regional Plan 2036
- Contribution Plans
- Ministerial Directions
- Council responses to previous submissions

The above documents have provided key knowledge and necessary understanding of the housing, social and environmental needs and impacts of our proposal. Our proposal, when completed, will incorporate and contribute the first innovative purposefully designed, environmentally sustainable housing development to the Goulburn Mulwaree area. It will provide additional housing options that are currently not available in the local government area.

In order to facilitate the subdivision of the land into smaller lots, an amendment to the LEP 2009 would be required. It is proposed that such an amendment would be consistent with minimum lot sizes prescribed for serviced residential urban land noting that adjacent lots on Gurrundah Road currently have a 2ha MLS but are proposed in a separate submission to the Strategy, to be amended to a minimum lot size of 2000sqm.

The proposed spot rezoning of the subject site will not detract from the town's urban density or structure, but rather, such a subdivision will provide an innovative transition from small lots of rural zoned land to more intensive urban settings. Furthermore, the site is located on the perimeter of a higher socio-economic urban area which will further

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benefit from the provision of an environmentally sensitive development that will be particularly of interest to retirees locating to the region as well as younger environmentally conscious people seeking a home with a "smaller ecological footprint".

The proposed development site is consistent with directives identified in the Goulburn Mulwaree Strategy 2020 and specifically, those directives that pertain to accommodating sustainable growth ie:

- *Facilitating urban development in the areas that allow urban infrastructure services to be provided in a cost-efficient manner.*

The site adjoins the site of the Goulburn Mulwaree city water reservoir on the corner of Gurrundah Road and Rossiville Road and reticulated water is currently provided to the site. The site is also neighbouring land fronting Rossiville Road which is fully serviced. Further analysis is intended to identify the most efficient option for the provision of reticulated sewer services.

It is noted that for reasons of ecological integrity, any proposed lot not serviced by reticulated sewer requires a minimum lot size of 2500sqm (Water NSW standard) with 1500sqm required for on-site waste water treatment. We hold concerns that such an outcome for any land development adjacent to the site on Gurrundah Road would present significant risks in terms of offsite impacts of odour and environmental integrity that could impact our site.

We wish to emphasise that environmentally sustainable developments such as that proposed, incorporate housing with a minimum 9 star energy rating as well as the highly valued 'Green Certification'. This is achieved via:

- a. an emphasis on solar passive design incorporating environmentally sensitive building design and street-scaping
 - b. maximised use of alternative energy sources such as solar
 - c. the use of proven environmentally sensitive building materials; and
 - d. the employment of innovative technology resulting in a reduction in water consumption and maximisation of a greener micro-climate across the development.
- *Accommodating residential living opportunities on less productive rural lands and in locations which would not detract from the cost-effective provision of services and utilities.*

The site is immediately contiguous with existing residential development and proposed adjacent development and as previously stated, the subject land is no longer economically viable for cattle or sheep production, however its **prime location** on the western boundary of the city and its **proximity to existing utilities** and to key services such as Goulburn Hospital (2.1klm), a range of schools - public and private (1klm - 1.7klm), CBD Post Office (3.7klm), parks and Aquatic Centre (1.8klm) make our proposal highly cost-effective in terms of the provision of services and utilities. The Strategy has already identified the subject site's precinct as an area **"more suitable for future urban residential development"** but not for 20 plus years.

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24 January 2020

However, this submission seeks to emphasise that our proposed development could provide innovative and additional housing options and a yield of 170 homes in the **short to medium term**. Such innovative housing options are not offered in any other location identified within the Strategy and we are confident, based on the population projections for the local government area, and our extensive research informing our proposed environmentally sustainable housing development, that a reconsideration of the priority status of our housing development proposal could result in a beneficial housing attraction 'phenomena' as people choose to relocate specifically to reside in such a residential development.

It is envisaged that our proposed development site will represent the first stage of a larger development within the immediate precinct as its success, in terms of demand and its high environmental focus, could result in the development acquiring a "housing destination status". It has been established that other adjoining landowners hold positive views about our proposed development and the subsequent expansion of the residential development over an appropriate period of time would further support the cost effectiveness of the provision of services and utilities to the development.

- *New urban areas with a sense of 'community' with key services available locally.*

Our proposed development would result in people with "like-minded" perspectives on the importance of achieving a smaller ecological footprint, choosing to reside in a purposefully designed, environmentally sustainable residence and locality. Consequently, a "community" with shared environmental values is created. Research based on such built environments, indicates that such a community is highly valued by its members and neighbours.

Issues/Concerns

Most importantly, and contrary to the statement in the Strategy (ref: pg 237) that the area has a "lack of infrastructure (roads, utilities, connections) and proximity to nearby services (shops, schools, community facilities) prevent the precinct from delivering affordable or higher density residential development" **our proposed development site is located in closer proximity to key services than existing and proposed Mary's Mount development, the Run-O-Waters existing and proposed development, the proposed Mountain Ash Rd and Brisbane Grove development. and the Middle Arm Road proposed development.**

Furthermore, the site has existing direct access to the sealed Gurrundah Road, reticulated water, electricity, gas, NBN and public transport services via both the Gurrundah Road and Rossiville Road.

Settlement Planning Principles cited in the 'Southeast and Tablelands Regional Plan' include a number of considerations for desirable housing outcomes. Outcomes that directly relate to, and have been considered in the course of our proposal include:

- *Protecting areas with high environmental value and/or cultural heritage value and important biodiversity corridors.*

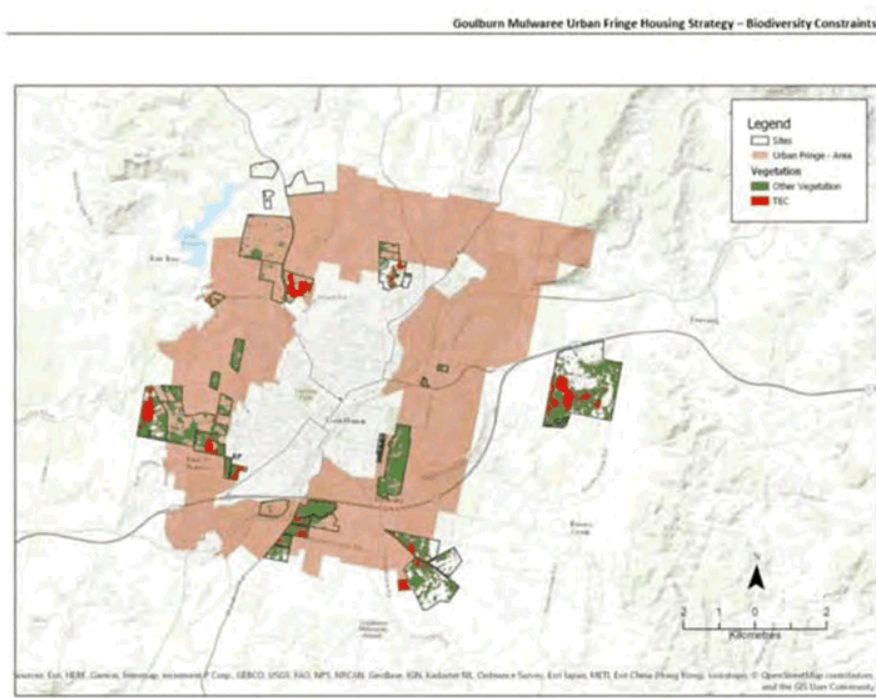
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The first version of the Strategy identified that the land at 70 Gurrundah Road (Site 22) had an ecological high conservation value (HCV). This issue was investigated further as it was apparent that there were inaccuracies. It has been subsequently ascertained that the ecological constraints map in the first version of the Strategy was outdated, and Ecological Australia has since provided a revised constraints map which identifies minimal constraints on the proposed development site. We have engaged a specialist in ecological and environmental constraints to urban development and are currently waiting for their analysis and report of the development site given the special environmental focus of the proposed development.



This report will further inform our proposed development and associated discussions with Council as we progress the concept planning to development endorsement and commencement.

The site and the Greenfield site criteria

The Strategy considers the suitability of areas within and on the fringe of Goulburn and Marulan for future additional housing development. The site is included in the area considered in the Strategy and we anticipate that changes will be made to the GMC LEP and DCP to give effect to the Strategy, including rezoning land to accommodate additional residential growth.

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As highlighted below, the land also meets the criteria for Greenfield sites set out in the Strategy. Having regard to the information provided in this submission, we therefore request that the Council review our proposed development site given the Strategy's cited statement of suitability of the land for serviced residential development and consider the real benefits of reprioritising our site for development given the outcome of an additional yield of 170 houses and additional housing choice that complements other development proposals.

Our site has been visited by experts in the development of environmentally sustainable housing such as we are proposing and they have identified that it is extremely well suited for the proposed residential development given its character, orientation and location on the city boundary within close proximity to key services in the city.

The rezoning and future development of the land would result in a logical and contiguous development with existing and other proposed redevelopment areas, and would facilitate a gradual density transition to rural areas..

The site is not identified as being subject to biodiversity or heritage constraints in the Ecological Australia Biodiversity Report or Biodiversity Constraints Analysis. Available reports do not identify the future subdivision of the land as being likely to result in the fragmentation of biodiversity corridors. The site is not subject to flooding, is not part of a riparian or waterfront corridor and is on Council's preferred side of the Hume Highway. The site is currently used for residential purposes with a small number of cattle grazing to manage any bush fire load risks.

Importantly having regard to the Council's prior assessment of the land, the drainage catchment is mainly to the South, South West (approximately 60%), and not to the North as previously assumed. Indeed, our site is equally and possibly comparatively, more appropriate for development in the short to medium term when compared with the characteristics and significant constraints of other proposed developments that have been identified within the Strategy.

Consistency of approach

To illustrate the suitability of the site for future development in the short to medium term, we have highlighted the similarities between our site and some other development sites. For example, in 2018, our site had been identified as having exactly the same 'constraints' as another development site in close proximity. The development was supported and has recently been successfully completed with all lots sold.

We are seeking the same level of support and as long-term residents of the area, we are keen to provide an innovative development that promotes the Goulburn area as a very desirable place to live.

Summary

For the reasons explained within this submission, it is proposed that a purposely built, environmentally sustainable residential development would benefit Goulburn more

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greatly through the provision of an initial additional 170 house lots in the short to medium term.

We therefore request that the Council consider including the proposed development site in the Urban and Fringe Housing Strategy as a short to medium term development opportunity and support the initiative in its anticipated amendments to the LEP.

Please do not hesitate to contact us on 0408 482 002 if you would like to discuss any aspect of our submission.

Yours sincerely

Jan & Alex Weir

David Long

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16 December 2019

The General Manager
Goulburn Mulwaree Council
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Via email: submissions@goulburn.nsw.gov.au

Dear Sir,

Draft Urban and Fringe Housing Strategy

Boral Limited (Boral) is an international building and construction materials group, headquartered in North Sydney, Australia. Boral is the country's largest construction materials and building products supplier with operations across the country, supplying concrete, quarry products, asphalt, and cement to infrastructure, residential and commercial development sectors.

Boral owns and operates a concrete batching plant at 30 Wilson Drive, Marulan within the defined Portland Avenue/Wilson Drive, Marulan Industrial Sub-Precinct. The plant was approved by Council in 1991 and forms part of Boral's strategic asset network operating on a campaign basis with variable levels of intensity and duration.

As a landholder and operator of strategic assets within the Goulburn Mulwaree Local Government Area (LGA), the Boral Land & Property Group has prepared this submission on behalf of Boral Resources (Country) Pty Ltd (Boral) in response to the exhibition of the revised draft Urban and Fringe Housing Strategy (draft UHFS) prepared by Elton Consulting on behalf of Goulburn Mulwaree Council (Council).

The following submission is framed to respond to recommendations made in the draft UHFS that are of relevance to Boral's holdings, ongoing and future potential operations. Specifically this submission focuses on those recommendations made in relation to land identified in the draft UHFS as Marulan Precinct 1, Marulan Town Centre.

Boral acknowledges that the draft UHFS does not in itself seek to rezone land. However, the Strategy does mark the first step in initiating a planning proposal that would amend the zoning provisions of the Local Environmental Plan (LEP). In this regard the current directions and recommendation set by Council create an expectation that rezoning would occur.

The role of the Marulan Industrial Precinct

The Portland Avenue/Wilson Drive Industrial Sub-Precinct is located in the south west of the town of Marulan and is accessed via Portland Avenue from the Highway and has an approved B-Double Route. This is the only road access point with no viable alternatives connecting the industrial sub-precinct to the broader regional road network. This current route does not require trucks to utilise the residential road network.

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The sub-precinct is largely occupied by general industrial uses including storage sheds and small service industries. Unlike other industrial sub-precincts in Marulan, this area has low vacancy rates (HillPDA, 2016) reflecting a high demand for small industrial holdings.

The sub-precinct provides services to the local community and provides for local employment opportunities reducing travel demands for existing residents.

The HillPDA Employment Lands Assessment, 2016 identified large consolidated holdings that had remained vacant for alternate zoning within the Marulan Industrial Precincts focus on land within the Suffolk Road Precinct located in the north of the town. No recommendations were made for rezoning or loss of industrial land within the Portland Avenue/Wilson Drive sub-precinct.

Revised draft UFHS

The draft UFHS identifies Lots 1 and 2 DP1053945, located on the corner of George Street and Portland Avenue, Marulan as an opportunity for rezoning from IN1 General Industrial to “urban residential”. This site forms part of the Portland Avenue/Wilson Drive Industrial Sub-Precinct and is located 248 metres north east of Boral’s holdings.

The recommendation raises several points for further consideration:

1. The introduction of incompatible land uses within proximity to industrial land and operations;
2. The loss of well located, serviced and accessible industrial land; and
3. The need for additional housing to meet dwellings targets, with objectives aimed at encouraging an oversupply of residential land.

Each of the above is considered in further detail below.

Incompatible land uses

The recommendation to rezone industrial land within the Marulan Town Centre, in particular Lots 1 and 2 DP 2053945, has not given sufficient consideration to the constraints associated with the proximity of and exposure to operational noise or road traffic noise associated with the adjacent industrial precinct.

Boral raises concern that rezoning of this land for “urban residential” purposes, either in totality or as a component of a mixed use development, would not provide a suitable transition between incompatible land uses and inevitably give rise to land use conflict.

Any progression of the identified opportunity should be accompanied by a clear discussion of constraints related to locating residential land within a defined employment lands sub-precinct and require any future rezoning application to demonstrate that land use conflict can be avoided. It is noted that objectives contained within section 4 of the draft UFHS make reference to the mitigation of land use conflict however in Boral’s experience these rarely prevent interface impacts arising and often lead to industrial operations being compromised.

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Any consideration of residential development at the interface of industrial zoned land should aim to prevent and overcome interface impacts that frequently arise between residential and industrial operations where zone transitions have not been adequately provided. Any such interface management measures should be aimed at protecting operating industry from incoming residential uses.

Loss of employment lands

The potential loss of industrial zoned land that is serviced and highly accessible has not been articulated within the draft Strategy.

The draft UFHS claims that the quantum loss of land, were it to be rezoned, would have no effect due to the availability of industrial zoned land elsewhere in the LGA. These claims have given no consideration to the hierarchy of industrial land, its purpose, or location and therefore have not fully considered the implications.

Justification and need

Despite the recommendation to rezone land at Lots 1 and 2 DP1053945 made in section 3 of the draft UFHS, the capacity of the site to support dwellings has not formed part of Council's dwelling targets or growth scenarios.

While it is noted that Council seeks to deliver "surplus" residential land, concern is raised that this approach often leads to poor planning objectives with rezoning driven by speculation.

Based on the evidence provided within the draft UHFS, the delivery on housing on this site is not necessary to support anticipated growth and housing demand. As such the recommendation is unnecessary and the potential impacts that are likely to arise are considered unjustifiable.

Requested amendments

Boral request that prior to formalisation of the draft Strategy that the following amendments be incorporated:

- Section 2 *Precincts* - Precinct 1 Marulan Town Centre be amended to
 - include industrial operational noise and road traffic noise as a land use constraint;
 - that Boral's plant be provided with a land use buffer to protect their operations; and
 - include in the recommendations made in the Precinct data sheet for Marulan Town Centre that rezoning of land occupied by the truck stop be contingent on a proponent being able to demonstrate:
 - the proposal is necessary to meet anticipated housing demand,
 - the proposal would not adversely affect the supply of employment lands based on the location and role of the sub-precinct; and
 - that adequate protection of residential amenity can be achieved and that operating industry can be protected from nuisance claims, such measures should include but not be limited to appropriate land use mix, built form, setbacks and attenuation.

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- Section 4 *The Priorities*, objectives amended to remove the word “minimise” to read as follows:

Objective, dot point 1: Delivery of surplus residential land

Dot point 1 should be refined to remove statements that encourage an oversupply of residential land that is not demonstrated to meet a demonstrated demand or supply gap. Encouraging a “surplus” of land will contribute to speculative land development. In this regard the delivery of land should be evidence led aimed at ensuring the right forms and typologies are achieved in the right locations.

An alternative objective may be: *Support the timely delivery of residential zoned land capable of meeting a demonstrated demand or an identified supply gap to meet current or future needs for the Goulburn Mulwaree LGA to 2036.*

Objective, dot point 6: Management of interface impacts

Objectives aimed at ensuring land use compatibility should be refined to recognise that rural land within Goulburn Mulwaree LGA is used for a range of primary production operations that are not limited to agricultural and include mining and quarrying operations. The objective should also be strengthened to protect existing primary producers from incoming incompatible uses to ensure the viability of established operations are not eroded overtime by ineffectual management and mitigation measures that rely on human behaviour.

The objective may be refined as follows to ensure the protection of existing primary production operators and future residents:

require future development, particularly at the residential/primary production and the residential/industrial interfaces to ***demonstrate that conflict between land uses can be avoided***

Objective, dot point 10: Retention of Employment Lands

The current objectives do not recognise the role of employment lands within Marulan town centre or provide any guidance or requirement to demonstrate that loss of such lands would not adversely impact on the delivery of local jobs or services.

The objective may be refined as follows:

Ensure sufficient and appropriate employment land is retained in ***Goulburn and Marulan***. Redevelopment ***opportunities within*** Goulburn should provide for and support commercial enterprise, service provision and employment as population increases and reduce escape expenditure.

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Conclusion

Boral requests that Council protect strategic industrial land from encroaching incompatible land uses that place unnecessary pressure on continuing operations.

Boral seeks that Council recognise within the Strategy document the need to protect existing industrial operations, including road access routes, from new or intensifying incompatible development forms, through measures such as adopting suitable transition zones as well as provisions requiring incoming development to demonstrate they can achieve suitable amenity taking into account the adjacent or nearby industrial activities at rezoning stage.

Boral, as a relevant stakeholder, requests to be kept informed, of the progress of the revised draft UHFS and any future amendments to the Local Environmental Plan and supporting Development Control Plans.

Should you wish to discuss any of the matters set out in this correspondence please contact me on email BoralPlanningNSW@boral.com.au or phone 0401 894 110.

Yours faithfully

A handwritten signature in blue ink, appearing to read "Rachael Snape", with a stylized, flowing script.

Rachael Snape

Planning and Development Manager, NSW/ACT
Boral Land and Property Group

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18 December 2019

The General Manager
Goulburn Mulwaree Council
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Dear Sir,

Draft Urban and Fringe Housing Strategy

Boral Limited (Boral) is an international building and construction materials group, headquartered in North Sydney, Australia. Boral is the country's largest construction materials and building products supplier with operations across the country, supplying concrete, quarry products, asphalt, and cement to infrastructure, residential and commercial development sectors.

As a landholder and operator of strategic assets within the Goulburn Mulwaree Local Government Area (LGA), the Boral Land & Property Group has prepared this submission on behalf of Boral Cement Limited and Boral Resources (NSW) Pty Ltd (referred to as Boral) in response to the exhibition of the revised draft Urban and Fringe Housing Strategy (draft UFHS 2019) prepared by Elton Consulting on behalf of Goulburn Mulwaree Council (Council).

An Urban and Fringe Housing Strategy was undertaken to identify residential rezoning opportunities to meet increasing demand for residential land as well as diversification of housing typologies. The strategy focuses on the townships of Goulburn and Marulan and marks the first step in initiating a change to the Goulburn Mulwaree Local Environmental Plan 2009. The Strategy is intended to meet the justification requirements of the Department of Planning, Industry and Environment's *Guideline for the preparation of a planning proposal*.

Boral has reviewed the exhibited materials and raises significant concern regarding the recommendations of the revised draft UFHS (2019). In particular concern is raised regarding the identification of land south of the Hume Highway, Marulan as capable of supporting future rural residential use.

1.0 Background

The preparation of a draft UFHS is aimed at identifying suitable land in and around the Goulburn and Marulan town centres for the purposes of meeting demand for appropriate and well located residential land as well as dwelling targets established by the South East and Tablelands Regional Plan. The plan targets the delivery of 3,500 new dwellings by 2036.

An initial draft Strategy was prepared in late 2018 and considered by Council at their meeting on 18 December 2018.

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The draft UFHS (2018) was prepared using an evidence based approach, focused on the delivery of new housing based on analysis of demographics and land demands that showed a trend towards smaller, serviced lots near urban services. Greenfield release areas were investigated for opportunities and constraints and established 10 criteria against which future planning proposals would be assessed for suitability. Of key importance in the consideration of land now identified under the revised draft UFHS (2019) is *criteria 9* that stated the following:

9. Avoid residential development on the southern/western side of the Hume Highway.

It is evident that under the initial draft UFHS (2018), expansion around Marulan was limited to the north of the existing town with no areas of investigation located to the south of the Hume Highway.

Boral did not respond to the initial exhibition as there was no clear intent or direction for the Strategy to rezone land within proximity to their holdings or operations.

Following the preparation of the initial draft UFHS, public exhibition was undertaken. As a consequence of matters raised by community members through exhibition, the draft UFHS (2018) evolved to include recommendations for the delivery of rural residential land (i.e. land considered suitable for zoning to R5 Large Lot Residential - LLR).

The revised draft UFHS (2019) acknowledges that rural residential land was initially excluded from consideration due to the capacity of urban fringe land to support the use and given the constrained nature of land around Goulburn and Marulan to do so would be an inefficient use of land.

Despite the above, the revised draft UFH Strategy (2019) has identified land south of the Hume Highway as being suitable for further investigation and potential residential rezoning.

2.0 Boral's submission

Boral objects to the inclusion of land south of the Hume Highway identified as Precinct 2 Marulan South and the recommendation that the land is suitable for residential rezoning. Boral requests that Council review the recommendations in relation to this precinct with a view to removing the precinct from the strategy. This request is based on the following:

- Lack of demonstrated demand (oversupply of LLR; no demand in Marulan South and sufficient supply elsewhere in the LGA, speculative rezoning likely to have long term implications for agricultural and resource operations);
- The potential interface impacts that would likely arise from the locating of an increased number dwellings within proximity to extractive industry, mining operations, and associated rail assets;
- Lack of site suitability due to inherent constraints and incompatibility of residential development with surrounding and established primary production uses.

Boral is concerned that inclusion of land identified as Precinct 2 Marulan South would lead to land use conflict due to its proximity to primary industry, including large scale extractive industry and mining, and that the justification provided within the report is not evidence led.

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2.1 Lack of demand for rural residential

There is pronounced disconnect between the final recommendations of the revised draft UFHS (2019) and the “evidence” presented in section 2 of the same report and the earlier draft UFHS (2018). The objective evidence provided within both versions of the Strategy indicate sustained demand over the past 10 years for a smaller serviced lots located close to services aimed at meeting the needs of an aging population throughout the Goulburn Mulwaree LGA, including Marulan. The revised draft UFHS (2019) anticipates this demand to continue and sets out in Section 2.3.1 (pp. 60 -62) that a total of 355 new dwellings are required within Marulan to meet projected growth demands.

Three precincts have been identified around Marulan to support future growth of the township. The majority is anticipated to occur to north of Marulan located adjacent to existing serviced land allowing for a logical extension of both the town and urban services. The two northern precincts have capacity to delivery of 1,325 new dwellings, almost 4 times the anticipated demand.

Notwithstanding that there is sufficient suitable land aligned to land demand located north of Hume Highway within proximity to the existing town centre, the strategy introduces the concept of “high demand” driven by “anecdotal evidence” to recommend rezoning to support large lot residential land.

The “anecdotal evidence” appears to be requests by individual landholders for their land to be considered for rezoning. These requests are acknowledged within the draft UFHS (2019) to be driven by low barriers to entry as land for rural residential subdivision is not serviced and therefore requires substantially less financial investment to realise a return.

There is an inherent conflict in presenting landowner driven requests for rezoning as a market demand or as “evidence” of a demand. Landowners have an inherent bias to realise an uplift in property values and rezoning recommendations based on such a request is not evidence based land use planning establishing a clear and logical “line of sight” between policy directions, evidence led planning and land delivery. Rather it is ad hoc and reactionary with the potential to contribute to long term impacts on urban form, land use creep, service delivery and land use conflicts.

While it is acknowledged that the revised draft UFHS (2019) includes an objective to deliver residential land in excess of demand to avoid land use and market constraints impacting on timely supply. There is no objective evidence to support the delivery of large lot residential within or around Marulan beyond the requests of individual landowners.

The delivery of small serviced lots, including Council’s objective of oversupply can be accommodated elsewhere without the need to support rezoning of land south of the Hume Highway.

2.2 Interface impacts

The revised draft UFHS (2019) has used constraints mapping to support the identification of land suitable for rezoning. This exercise involved desk top surveys using available public information and as such has not been ground-truthed at the property level (p. ix, EC; 2019).

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Boral raises concern that the introduction of residential uses within proximity to large scale extractive industry and mining operations will impact on the utility of existing mineral resources. Boral's operations are key providers of raw materials in the Sydney building and construction sector. Daily operations include the movement of goods along the rail lines combined with blasting activities that may impact on residential amenity.

The proposed rezoning of this land for residential purposes is considered to be contrary to Ministerial Direction G that aims to *manage the ongoing use of mineral resources* and that insufficient consideration has been given to Boral's operations including the ancillary aspects of these operations (i.e. the proximity of future residential to the rail line) to draw the conclusions that *"future urban land does not encroach on existing mineral resources"* and *"important mineral resources protected"*.

2.3 Constraints, opportunities and site suitability

As set out in section 2.2 above, constraints and opportunities analysis has been applied at a precinct level to inform land capability and capacity to support urban or large lot residential land. Land identified as suitable for residential rezoning in proximity to Boral's operations, is identified as Precinct 2 Marulan South.

The analysis of constraints is limited to four factors, including the main goods line, the Hume Highway and its influence to urban form and growth, lack of urban infrastructure (water, sewer etc), and potential flooding.

A review of the supporting desktop information contained within the Appendices of the report and advice from agencies covered in the supporting Consultation report appears to have been omitted the following:

- The site is located within the Sydney drinking water catchment and is identified as being a moderate to high risk to water quality;
- There is no information presented for Marulan in relation to soil capability (erodibility, slope) or vegetation;
- Category 3 bushfire affectation – medium bushfire risk requiring a 30 metre buffer
- Identified as being within a location of "place of aboriginal significance";
- The study area defined for ecological investigation in Appendix E, Figure 2 does not include the full extent of land identified for rezoning as being the "urban fringe" and was not the subject of detailed investigation
- Figure 10 in Appendix E identifies an area of high environmental values along the northern extent of the site;
- 2nd and 3rd order streams, the primary watercourse is named *woolshed creek*. Generally the watercourse travel east-west through the site and would constrain future road construction and the need to provide riparian buffers not considered;
- Impact of noise associated with the east-west main line rail way and Boral's north-south rail line (that operates 24/7) not considered;
- The potential impact of the proximity of residential to rural industry and extractive industries.

The analysis provides no consideration of "opportunities" that overcome the constraints of the land. In particular, there is no consideration of why it is suitable to extend the urban fringe across

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the Hume Highway, that is acknowledged in earlier sections of the strategy (refer to page 62, section 2.3.1 Current and Planned Housing *Marulan*) to create a barrier to expansion of the township.

Based on the above, there appears to be limited justification for the inclusion of land within Precinct 2 Marulan South in the revised draft UFHS (2019). The land is significantly constrained by characteristics that render the site unsuitable for intensified residential development of any kind. Moreover, extension of the urban fringe is proposed across the Hume Highway that currently forms a clear and logical boundary between urban and rural land.

3.0 Conclusion

Boral raises significant concern with the proposal to rezone agricultural land, physically isolated from an urban centre by a significant barrier without any supporting evidence of actual demand or need. To proceed on the basis of an unsubstantiated demand in an environment where sufficient supply of land that meets project demand, will have adverse long term impacts contributing to creep of urban uses in rural lands and threaten the viability of key operating industries.

The recommendation to support rezoning of rural land to support residential development is not supported by clear, cohesive or objective evidence to adequately demonstrate demand or need for the proposed quantum or type of land within Marulan South. The recommendation to support the delivery is based on limited "anecdotal evidence" drawn from requests of landowners' not objective data that indicates demand for small, serviced lots close to services.

The current approach is considered wholly insufficient particularly when considered against the backdrop of the significant land constraints that have not been fully articulated within the land capability and compatibility assessment, not the least of which is the potential for interface impacts arising from proximity to primary industry and the associated rail infrastructure.

Boral requests that Council further revise the strategy in relation to land within Marulan, principally that the recommendations relating to land south of the Hume Highway, Marulan identified as Precinct M-2 not be progressed and be removed from the Strategy.

Should you wish to discuss any of the matters set out in this correspondence please contact me on phone 0401 894 110 or email BoralPlanningNSW@boral.com.au

Yours faithfully

A handwritten signature in black ink, appearing to read "Kate Jackson", with a stylized flourish at the end.

Kate Jackson
Regional Manager, NSW/ACT
Boral Land and Property Group

B-3 Council Minutes Post Exhibition Review 21 April 2020

15.2 DRAFT URBAN AND FRINGE HOUSING STRATEGY - POST EXHIBITION REVIEW

RESOLUTION 2020/120

Moved: Cr Margaret O'Neill

Seconded: Cr Peter Walker

That Council Move into Committee of the Whole.

Council moved into Committee of the whole at 6:36pm.

CARRIED

RESOLUTION 2020/121

Moved: Cr Margaret O'Neill

Seconded: Cr Andrew Banfield

That Council move back into Open Council.

Council moved back into Open Council at 7:22pm.

CARRIED

RESOLUTION 2020/122

Moved: Cr Margaret O'Neill

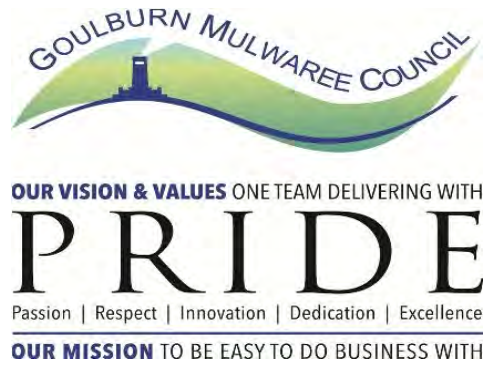
Seconded: Cr Peter Walker

That

1. The report from the Business Manager Strategic Planning regarding the revised *Draft Urban and Fringe Housing Strategy* be received.
2. Council defer the revised *Draft Urban and Fringe Housing Strategy* for a period of three months for further consultation with submitters and a Council Briefing for a full Saturday.

CARRIED

**B-4 Council Meeting Business Paper
Enclosures 16 June 2020**



ATTACHMENTS

ENCLOSURES

Ordinary Council Meeting

16 June 2020

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Attachment 1 - DUFHS – Final Consultation – Submission Summary

	Submitter	Submission Summary	Comment
1	<p>Ian Shuttle for John Craig and Jeanette Shuttle</p> <p>Zone Boundary Lots 11/12 DP 1156095</p>	<p>This submission relates to the current zone boundary between the E3 zone and R2 zone as it applies to Lots 11 and 12 DP 1156095.</p> <p>The submission is advising of the suitability of the sloping portion of the site for residential development. It would appear that in the past the LEP has applied the zone boundary partly based on slope.</p> <p>The submission provides details on slope stability in the E3 section in support of an adjustment to the zone boundary.</p>	<p>As stated in the Consultation Report, this matter is quite specific and could be dealt with in a site specific Planning Proposal. The Strategy is a broader planning document concerning housing (demand/supply/locations), it is not intended to address detailed site specific matters.</p> <p>A future planning proposal to consider the zone boundary issue is not inconsistent with the Strategy as this site (and the E3 zone) is contiguous to existing residential zoned land.</p> <p>Recommendation: No change to the Strategy and the submission of a site specific Planning Proposal to resolve the zone boundary issue.</p>
2	<p>David Kelly Gunlake Quarries</p> <p>Gunlake Quarry Haul Route</p>	<p>This submission reiterates Gunlakes' concerns regarding the protection of its haulage route from potential residential interface issues with the Marulan North residential precinct.</p> <p>The submission cites State Environmental Planning Policy (<i>Mining Petroleum and Extractive Industries</i>) in terms of the objectives being applied to protect the haulage route.</p> <p>The submission is seeking a 250m wide buffer for the haulage route between the Brayton Road intersection, and Hume Highway along Ambrose/and Red Hills Road similar to the buffer indicated in the Strategy for the Hume Highway.</p>	<p>The Strategy does identify the haulage route for Gunlake as a constraint in the Marulan North Precinct. A specific buffer distance was not specified in the Strategy due to the need to do a noise assessment and traffic assessment as a part of future planning. Similar to other precincts the opportunity area mapped deliberately did not follow strict property boundaries in the expectation of future constraints etc and studies being used to determine boundaries. As it currently stands the buffer as mapped in the precinct covers a distance of approximately 260m south of Ambrose – Red Hills Road. The opportunity area is indicated as being to the south of this distance.</p> <p>The precinct map could be amended to include the 250m buffer in the legend (similar to the Hume Highway). It is noted though that this is just a Strategy document and that further detail around this issue will need to be dealt with at the Planning Proposal/DCP Master Planning phases.</p> <p>Recommendation: The legend in the precinct map be amended to include the 250m distance in the buffer (similar to Hume Highway) for Ambrose/Red Hills Road from Brayton Road to the Hume Highway.</p>

	Submitter	Submission Summary	Comment
3	Urbanism on behalf of Ganter Mistful Park	<p>This submission requests that:</p> <ul style="list-style-type: none"> a) The DUFHS acknowledges Council's Resolution of 6 March 2018 in relation to the Mistful Park Urban Expansion Lands Planning Proposal (Precinct 5) b) The DUFHS is corrected to acknowledge the more rigorous environmental field work that has already been undertaken by Woodlands Environmental Management in direct consultation with Council's environmental and Strategic Planning staff in 2017. Further, that environmental overlays contained in the DUFHS are corrected to identify the site as being subject to detail site surveys already undertaken by the landowner in consultation with Council staff. c) That the DUFHS specifically identifies Mistful Park Urban Expansion Lands Planning Proposal as substantially progressed and proponent-led and that a report recommending its progression to the NSW Department of Planning Industry and Environment LEP Gateway be received for Council's consideration along with the draft Strategy so that the detailed environmental assessments and pathways can be progressed with OEH. d) That Council, mindful of the delays in finalising the DUFHS, instructs staff to refer the Mistful Park Urban Expansion Lands Planning Proposal to the Department of Environmental Planning, Infrastructure and Environment (DPIE) seeking a Gateway Determination without further delay, noting its consistency with the DUFHS. 	<p>As previously stated the DUFHS is a general strategy concerned with housing supply/demand, whilst identifying suitable locations for expansion. It is not intended to the means to flag the history of each area under consideration. The Mistful Park site is identified as being within the pre 2036 area for land release.</p> <p>The site does have some areas of biodiversity that are required to be further assessed under the new legislation introduced after the earlier Flora and Fauna Report commissioned by Ganter. It is agreed that the study by Ganter may be more accurate - the Strategy does state that it is only flagging high level constraints.</p> <p>Given that NSW DPIE (Environment) – former Office of Environment and Heritage, had provided a specific comment on this site to the effect that a biodiversity assessment under the new legislation needs to be undertaken, it will be this assessment, which will determine land capability and extent/location of residential in relation to biodiversity.</p> <p>This planning proposal was deferred for consideration with the Strategy and once the Strategy is adopted by Council, it is agreed that the processing of this proposal should proceed.</p> <p>The resolution stated that:</p> <ol style="list-style-type: none"> 1. <i>The report from the Senior Strategic Planner regarding the Planning Proposal to rezone Mistful Park (Lot 1 & 4 DP 1223269 and Lot 214 DP 1231260) be received.</i> 2. <i>The Planning Proposal to rezone the 'Mistful Park' property is supported in principle but deferred at this time pending the outcome of the Urban & Fringe Housing Strategy.</i> 3. <i>The Planning Proposal to rezone the 'Mistful Park' property be included on a list of properties to be considered in the Urban & Fringe Housing Strategy and the applicant be encourage to investigate the concerns raised by the State Government Departments.</i> <p>Based on the above wording of the resolution, being "in principle" support, a further Council resolution is required to proceed with the processing of this matter following the endorsement of the Strategy.</p>

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			<p>Recommendation: That the Strategy is endorsed and following this Council consider a report on this planning proposal to proceed.</p> <p>The biodiversity issues identified to be addressed by an assessment as required by DPIE (Environment) as per the <i>NSW Biodiversity Conservation Act 2016</i>. Such an assessment is likely to be a condition of any Gateway determination for a planning proposal.</p>
4	<p>Precise Planning</p> <p>On behalf of Owner –</p> <p>515 Crookwell Road, Kingsdale</p>	<p>A Preliminary Onsite Wastewater and Stormwater Management Constraints Assessment was included with this which concludes:</p> <ul style="list-style-type: none"> There are no significant constraints to onsite wastewater management at the site Sufficient land will be available within proposed lots to dispose of effluent in an ecologically sustainable manner such that the NorBE test is satisfied. No water quality impacts are expected on downstream water resources provided that the subdivision layout is undertaken with care and in accordance with the constraints mapping undertaken herein. <p>In relation to water quality (stormwater), the report at section 4.5 concludes:</p> <ul style="list-style-type: none"> Inclusion of appropriate water quality systems such as roadside swales, rainwater tanks and end of line ponds would result in the achievement of a NorBE water quality outcome Transport of sediment, nitrogen and phosphorus would be reduced from current conditions and development of the site would in fact have a beneficial impact on water quality when compared to current rural grazing activities There would subsequently be no detrimental impact to the water quality entering the downstream Sooley Dam as a result of a future large lot residential subdivision. <p>Based on the above, the proponent's position in relation to the inclusion of this land in the Goulburn Housing Strategy is reiterated based on the following:</p> <ol style="list-style-type: none"> The inclusion of this land into the housing strategy is not guaranteeing it will be rezoned. It is simply affording the owner the 	<p>This site is not required to meet the demand for housing as identified in the Strategy. As stated in the accompanying Council Report, the Strategy identifies a surplus of 1,389 residential lots in Goulburn to 2036 with further land identified post 2036. This surplus may be reduced due to site specific constraints in some locations which is likely to generate further large lots for residential or rural residential.</p> <p>The site is not contiguous with existing urban development.</p> <p>The site has a particular constraint in relation to its proximity to a town water supply that other opportunity sites do not have.</p> <p>Urban (serviced) residential opportunity areas identified in the Strategy follow the watershed between the catchment that feeds into Sooley Dam and the catchment immediately to the South which feeds into the creek below Rossi Weir. This provides a visual as well as physical barrier and creates a logical transition point when approaching the town.</p> <p><u>The suggestion that the site can be developed, would be an argument that could apply to most sites in the local government area, including those that are outside the Strategy opportunity areas.</u></p> <p>The site is currently zoned E3 Environmental Management with the associated limits to land uses, furthermore, this site has been zoned E3 since 2009 - the Strategy is not altering this situation.</p> <p>Whilst intensive livestock agriculture is a permissible use, it would still require development consent and concurrence from Water NSW in relation to water quality.</p>

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		<p>opportunity to pursue a pathway for rezoning, if he so chooses. It would be the owner's responsibility to undertake all the further studies and liaise with all the various Government departments to persuade them that the rezoning should proceed. All that is being requested of Council at this point is to include it in the strategy.</p> <p>2) The proponent is aware that there are numerous constraints affecting the site. However, at his effort and cost, he is willing to investigate each and every constraint, as the process requires, without it becoming the burden of Council.</p> <p>3) The reports relating to the rezoning process is at the full cost of the owner. The rezoning would not create any demand on the public purse.</p> <p>4) The land is only about 1 kilometre from the edge of the existing residential area of Goulburn.</p> <p>5) If the land is not included in the Housing Strategy, Council would be assigning it to be effectively sterilised from any productive use for possibly 20-30 years. Intensive Livestock Agriculture is not permitted in the zone. Intensive Plant Agriculture is permitted but the ability to control nutrient runoff is far less effective than a subdivision. This is confirmed by the Martens report. Extensive agriculture is permitted, but again it would result in animal droppings running into the dam.</p> <p>6) The issue of demand is a commercial decision by the developer. However, it should be pointed out that if demand for this type of development (rural/residential) significantly increases over time, then including it in the strategy at least gives the option of helping to satisfy the demand, whereas if it is not included, the supply will not be available and the community would not be able to benefit from the growth that would otherwise occur.</p> <p>7) In terms of housing targets, there is no guarantee that the areas favoured by the current DRAFT document will be able to be developed, due to the constraints not being fully investigated at this time.</p> <p>Further, some landowners may be unwilling or unable to develop their land at a time when the demand is there, which would mean that the Housing Strategy's housing targets will not be met.</p>	<p>Furthermore, it is one of a number of permissible uses which apply to the zone in general but may not be suitable for this site. It is not a strong argument to suggest that because intensive livestock agriculture is a permissible use that residential should be considered as an alternative.</p> <p>Whilst it is appreciated that the owner would pay for the associated costs of site specific studies and rezoning fees, if Council does not intend to extend the opportunity area further, it would be more appropriate to make a strategic decision at this point rather than allow for an owner to fund ongoing costs.</p> <p>Further specific discussion on the submitted <i>Preliminary onsite Wastewater and Stormwater Management Constraints Assessment: 515 Crookwell Road, Kingsdale</i> prepared by Martens Consulting Engineering and in relation to water quality management issues is made in the accompanying Council Report.</p> <p>Recommendation: This submission is not supported and the land remain excluded as an opportunity area.</p>

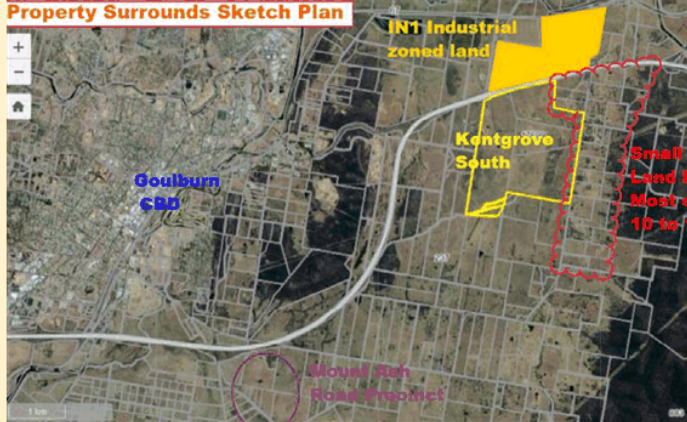
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5	Tomasz Planning On behalf of the owner of Glenrock	<ol style="list-style-type: none"> The inclusion of Marulan South is accretive [form part of the gradual growth or increase] to the community and consistent with the Strategy. Economic and social reasons for inclusion of this area being <ul style="list-style-type: none"> the inclusion of this area is required for connectivity to other land which may have potential for residential (and that the more lots developed would make it more viable for infrastructure exclusion from the Strategy would be effectively be for a period – to 2036; the precinct is close to railway stations at Marulan and Tallong; there are a substantial number of rural residential properties such as Glenrowan Green in proximity along Highland Way [note this subdivision is actually located within the RU5 village zone in Tallong]. The stated factual reason for excluding the relevant land is fundamentally flawed, as it rests on 3 external submissions which have been completely mischaracterised by BM Strategic Planning. The decision to exclude this land based on the Boral, DPIE (Geoscience) and Water NSW submissions is fatally flawed. The recommendation does not benefit the community and only benefits Boral. Supporting Boral instead of the community's interest despite it not adjoining Boral's site. Council should not be placed in a position where they are asked to support a recommendation at the expense of their community and own reputations. Exclusion of the relevant land would deny the community in practical terms for 20 years potential to develop in a cohesive and sympathetic way along Highland Way. By including the land in Marulan East (South) Council loses nothing, even if it is found that it cannot be redeveloped through the planning proposal process. 	<ol style="list-style-type: none"> The Marulan South (East) rural residential opportunity area was included at the suggestion of Elton Consulting when land capability for rural residential was determined as being limited following the exhibition of the first strategy. As a percentage of supply the 30 lots potentially identified in this precinct were relatively low and represented around 8.5% of the identified need for a total of 350 dwellings/ lots in the Strategy for Marulan. The Strategy generally looked to limit rural residential to 10% of supply given the larger amounts of land required to meet a larger minimum lot size of 2ha (in comparison to urban land release). The argument that Marulan's expansion to this location is "accretive" is unclear. Marulan can expand to the Northern Precinct and can meet supply well beyond 2036, without having to cross the Hume Highway. Expansion of Marulan to the North which is less constrained and will be serviced will also be accretive and satisfy demand. The economic arguments as raised in this submission are: <ul style="list-style-type: none"> the inclusion of this area would be required if extension of rural residential is proposed, however, this is not recommended and therefore not proposed. exclusion from the Strategy would be effectively be for a period – to 2036 , however, this argument does not take into consideration the monitoring component of the Strategy, furthermore, this argument could be used for any land excluded from the Strategy; the precinct is close to railway stations at Marulan and Tallong as is other land identified in the Strategy; there are a substantial number of rural residential properties such as Glenrowan Green in proximity along Highland Way. This subdivision is actually located within the RU5 village zone in Tallong. Lots along the northern side of Highland Way are generally 10ha or greater. Lots on the southern side of Highland Way range in size with a couple just under 10ha and other lots being larger. There are no other rural residential subdivisions down to 2ha lots sizes along Highlands Way. <p>The arguments tend to be based on the need for supply of rural residential land for housing. As discussed in the accompanying</p>


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		<p>9. Excluding land on the basis of the Boral submission is not in the interests of the community.</p>	<p>Council Report and below, it is considered that the land is surplus to meet the demand for housing identified in the Strategy.</p> <p>3. The submission from Water NSW was not supportive of the development of the Marulan South area – south of Highland Way and east of the highway. It is agreed that being “unsupportive” does not prevent further study and assessment of this matter. However, the addition of 30 rural residential lots as limited by water quality issues was not considered fundamental to housing provision to meet demand identified in the Strategy when considered in context with the excess of housing identified in the Strategy for Marulan and given the likelihood of rural residential lots being generated on constrained sites within the Marulan North Precinct.</p> <p>Water NSW advised in its submission dated 18 December, 2019 advised:</p> <p><i>The Strategy also proposes to accommodate Large Lot Residential (unsewered) development in an area referred to as Marulan South (Figure D). It appears this area is being put forward in place of former Deferred Area 16 which lies south of the railway line. Both former Deferred Area 16 and the current Marulan South Opportunity Area have significant water quality risk constraints. Based on the results of the SLWCA for Residential Unsewered Lots (4,000m² to 2ha), both areas are characterised by Moderate to Extreme Risks to water quality, with most of the land being dominated by an Extreme risk. The Marulan South area contains a number of 1st and 2nd order drainage features and, as raised earlier, the constraints analysis, does not take into account the 5 buffer distances for EMAs. The land may be more constrained than anticipated by the Strategy. WaterNSW is generally not supportive of unsewered development occurring in this area.</i></p> <p><i>As an alternative, based on results of the SLWCA for Residential Unsewered Lots (4,000m² to 2ha), areas south-west of Marulan between the Main Southern Railway and Hume Highway have land areas that vary from Low to Extreme Risk to water quality, with more areas of Low Risk potentially available for development. WaterNSW would welcome the</i></p>

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			<p><i>opportunity to discuss with Council whether this area might be more suitable in providing a limited supply of Large Lot Residential housing.</i></p> <p>The area identified rural residential was relatively small in terms of yield and coupled with the extreme water quality risk and effluent management area (EMA) buffers was likely to have a reduced yield.</p> <p>The submissions from NSW DPIE (Geoscience) and Boral were not relied upon for this decision to exclude this area from the Strategy.</p> <p>It is agreed that when looking at the DPIE (Geoscience) submission that I had inadvertently included both reference to its objections to for land south of the railway line with the area to the north (when in fact they were supportive of the area north of the railway line in this precinct. DPIE's submission reads as follows:</p> <p><i>The Division has no concerns with the Marulan South area (north of the main Southern Railway), however further residential development within area M-2 south of the Main Southern Railway in the vicinity of the Peppertree Quarry private rail line (Consolidated Mining Lease16) would be of concern to the Division.</i></p> <p><u>This error is noted and will be identified as a correction in the accompanying report to Council.</u></p> <p>4– 6. Reliance on the Boral submission is cited as another objection to the exclusion of this area, however decision making on this matter :</p> <ul style="list-style-type: none"> • Water NSW concerns over water quality risks and resultant lack of yield. • Access/location. • The precinct is not contiguous with Marulan. • It is not actually required to meet housing demand in Marulan. <p>The issue of rural residential interface with mining activities is a valid one generally especially in Marulan and is a consideration.</p>

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			<p>However, the primary consideration is water quality coupled with an excess of supply in Marulan North.</p> <p>The criteria for the Strategy for R5 large lot residential development included (amongst other criteria):</p> <ul style="list-style-type: none"> • The resulting development will not adversely impact on the groundwater system. • The need for additional lots can be justified in terms of supply and demand. <p>The Strategy identifies urban residential land with a potential yield of 694 dwellings (in Marulan North) and a further post 2036 yield of 631 dwellings.</p> <p>Marulan does not need an additional 30 lots identified in this precinct when it is only required to provide an additional 355 dwellings. The Strategy is more concerned with identifying the least constrained land in Marulan North and flagging this area for further development.</p> <p>Given the numbers and site constraints in Marulan North, it is likely that yields may be reduced in favour of some larger lifestyle lots as the further site specific studies and constraints further develop with future study.</p> <p>7. As previously stated, the suggestion that exclusion from the Strategy would be effectively be for a period to 2036, does not take into consideration the monitoring component of the Strategy, furthermore, this argument could be used for any land excluded from the Strategy. Should it be identified through monitoring or changes in demand that the Strategy needs to be reviewed, then this can be undertaken before 2036 as needs dictate.</p> <p>The Strategy is fundamentally concerned with meeting housing demand and supply which it has done. Furthermore, the review and consideration of appropriate uses for rural land is a matter to be considered in the proposed <i>Resource Lands (Agricultural and Extractives) Strategy</i>.</p> <p>8. The argument that the inclusion of this extended area could be left to be determined as a part of a planning proposal is</p>

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			<p>effectively arguing that there is no need for a strategy to consider this area's inclusion. This argument could be used on other sites, also and is not a strategic approach.</p> <p>9. As previously stated, this matter is not excluded on the basis of reliance on Boral's submission, although rural residential interface is a relevant issue for consideration in an area where there are a number of extractive industries operating (i.e. refer submission from Gunlake etc).</p> <p>Recommendation: The accompanying Council report include a correction regarding the DPIE Geoscience submission.</p> <p>The Marulan East (former South) precinct remain excluded from the Strategy as an opportunity area.</p>
6	<p>Ross Cameron and Charles Mendel, Co chairmen</p> <p>Southern Highlands Progress Association</p> <p>Note: no prior submissions to the Strategy have been submitted whilst the Strategy was on exhibition by the Southern Highlands Progress Association.</p>	<p>This submission relates to the proposal to exclude the rural residential opportunity area from Marulan East from the Strategy and refers to the Tomasy Planning submission referred to above.</p> <p>The submission requests the inclusion of the Marulan East precinct identifying a rural residential opportunity area would be beneficial for the following reasons:</p> <ol style="list-style-type: none"> 1. The area adjoins Marulan and runs in one long continuous stretch along Highland Way. Highland Way forming a residential area and corridor. Therefore inclusion in the Strategy would benefit the immediate sense of continuity, development and cohesion within the community, and provide a much needed residential presence which would in turn support Marulan, Tallong and Wingello. 2. Reiterate issues raised in the Tomasy Planning submission that the current recommendation to exclude this area is not substantiated by the Water NSW, Department of Planning (DPIE – Geoscience) and Boral submissions. The content of these submissions being inaccurately presented to Council. 3. Agrees with the Tomasy Planning commentary on the Boral submissions and would be concerned if Council supported a business at the expense of the community. 4. Community benefit as per Tomasy Planning submission, and adds that there would be no detrimental impact having this considered in a planning proposal. 	<p>As per the comments above.</p>

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7	<p>Suresh Guduguntla</p> <p>17699 Hume Hwy Towrang [Goulburn].</p>	<p>Requests the extension of the Urban and Fringe Housing Strategy to include the land known as 17699 Hume Hwy Towrang [Goulburn].</p> <p>This submission is suggesting that the property identified in the plans below is suitable for rural residential lots.</p> <p>It is also suggesting tha the proximity of this property to Goulburn is closer than the rural residential areas identified in the Strategy for the Mountain Ash precinct.</p> <p>It is pointing out nearby lots of 10 – 16 ha in area on Boxers Hill Road.</p> <p>Property Surrounds Sketch Plan</p>  <p>It is requesting a rezoning to permit lots 2 – 5 ha and 10h in area as indicated in the plan below.</p>	<p>This area currently has a 20ha minimum allotment size.</p> <p>Unlike the Mountain Ash precinct, it does not have any direct access to Goulburn without accessing the Hume Highway.</p> <p>The Housing Strategy is primarily concerned with housing demand and supply. This property is not required to meet supply for the Strategy.</p> <p>The property is not contiguous.</p> <p>The Strategy is not intended to be a review of rural land utilisation and minimum allotment sizes in rural zones.</p> <p>Recommendation: No change to the Strategy. This property is not contiguous, and the land is not required to meet supply for housing.</p> <p>The Strategy identifies Opportunity Areas for rural residential with better access to Goulburn. The Mountain Ash and Brisbane Grove Precincts have existing road access via Braidwood Road and Windellama Road, without accessing the Hume Highway.</p>

	Submitter	Submission Summary	Comment
			
8	Stewart Thompson Run of Waters Precinct	<p>This submission is supportive of the inclusion of the residential opportunity area identified to the north of the existing Run of Waters area.</p> <p>The submission re-states the suitability of the precinct for residential development based on the availability (or potential availability) of essential services including:</p> <ul style="list-style-type: none"> ▪ Water ▪ Sewer ▪ Electricity <p>It identifies the opportunities around the use of existing riparian areas for natural and open space uses in addition to stormwater.</p> <p>Encourages Council to recognise the existing biodiversity constraints with the presence of Tablelands Box Gum Woodland, wildlife corridors etc.</p> <p>Suggests no alteration to lot size or future development allowed along the northern boundary of the existing Run-O-Waters development.</p> <p>* Lots 107, 109 & 110, 112, 113 DP1218989 & Lots 18:22</p>	<p>The Strategy identifies this precinct from the north of the existing Run O Waters area through to the southern side of Gurrundah Road as having potential for housing.</p> <p>The potential varies throughout the precinct with the area identifying urban and large lot residential areas of potential.</p> <p>There are areas of biodiversity interest which will require further assessment and may impact development potential. This is the area containing the Tablelands Box Gum Woodland.</p> <p>This area currently has a minimum allotment size of 2ha, which following further biodiversity assessment be the limit of its potential which was partly why it was not identified for urban. Servicing this portion of the precinct was also requiring further information to determine capacity.</p> <p>Recommendation: No change to the Strategy is required.</p>



13 May 2020

The General Manager
Goulburn Mulwaree Council
184-194 Bourke St
GOULBURN NSW 2580

Dear Mr Bennett

Submission – Draft Urban and Fringe Housing Strategy

Urbanism has been engaged by Ganter Constructions to prepare the following submission to the Draft Urban and Fringe Housing Strategy.

Ganter Constructions are concerned that earlier submissions made highlighting significant shortcomings of the environmental investigations undertaken to inform the Strategy continue to be ignored. This is despite extensive delays over the past 2.5 years in finalising what was originally supposed to take no more than 6 months to complete.

Ganter Constructions lodged a planning proposal with Council in September 2017. At its meeting of 6 March 2018, resolved as follows:

- 2. The Planning Proposal to rezone the 'Mistful Park' property is supported in principle but deferred at this time pending the outcome of the Urban & Fringe Housing Strategy.***
- 3. The Planning Proposal to rezone the 'Mistful Park' property be included on a list of properties to be considered in the Urban & Fringe Housing Strategy and the applicant be encouraged to investigate the concerns raised by the State Government Departments***

Ganter Constructions welcomed this decision confident that having already undertaken detailed environmental audits in consultation with Council's Environmental Officer, the DUFHS would not present any delays to their planning proposal and would progress quickly.

Despite the above resolution, Ganter Constructions are no closer to receiving a gateway determination which is necessary to enable consultations with State Government Departments to commence.

These delays could be justifiable if they were necessary to add value to the detailed environmental investigations and planning proposal already commenced at Ganter Constructions expense. Instead, the outcome is a DUFHS that relies to a cursory 'look over the fence' to evaluate environmental lands. This was described by the DUFHS as follows:

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ACN 130 715 436
L26, 1 Bligh Street
Sydney NSW 2000
Phone: (02) 9053 7373
www.urbanism.sydney

*"The validation was carried out from accessible public roads adjoining the identified Precincts. The purpose of the validation was to **visually identify** and update the **existing mapped** vegetation data with any gross inconsistencies. **No detailed survey was carried out over the Precincts.**" (emphasis added)*

This approach is significantly inferior to the detailed on-site field surveys undertaken by Woodlands Environmental Management in consultation with Council's Environmental staff in August 2017. The methodology for this field work was described as follows:

*"The flora survey was undertaken **using quadrats, random meanders and targeted searches for Threatened Species. Two quadrats were surveyed within remnant Yellow Box - Blakely's Red Gum grassy woodland**, with additional random meanders. Surveying within highly modified and disturbed vegetation was undertaken using random meanders."*

The outcome of this detailed field work was illustrated in **Figure 1** (overleaf) prepared by Woodlands Environmental Management in support of the planning proposal. This equated to approximately 24% if the site being identified as containing Blackly's Yellow Box Woodland.

However, under the 'rapid visual validation' (an inferior and high level methodology) undertaken to support the DUFHS, all but the entire site has been identified as containing TECs or HEV land (see **Figure 2**).

While it is noted and acknowledged that the Draft Strategy recommends that, the Precinct 5 Middle Arm West area, that the subject site forms part of in this rendition of the Strategy is to "Rezone land immediately adjoining the existing urban fringe in the short/medium term to urban residential", the recommendation also causes ambiguity by recommending that the Precinct is a "Long term development opportunity subject to a detailed masterplan".

It is requested that:

- a) The DUFHS acknowledges Council's Resolution of 6 March 2018 in relation to the Mistful Park Urban Expansion Lands Planning Proposal (Precinct 5)
- b) The DUHFS is corrected to acknowledge the more rigorous environmental field work that has already been undertaken by Woodlands Environmental Management in direct consultation with Council's environmental and Strategic Planning staff in 2017. Further, that environmental overlays contained in the DUHFS are corrected to identify the site as being subject to detail site surveys already undertaken by the landowner in consultation with Council staff.
- c) That the DUFHS specifically identifies Mistful Park Urban Expansion Lands Planning Proposal as substantially progressed and proponent-led and that a report recommending its progression to the NSW Department of Planning Industry and Environment LEP Gateway be received for Council's consideration along with the draft Strategy so that the detailed environmental assessments and pathways can be progressed with OEH.
- d) That Council, mindful of the delays in finalising the DUFHS, instructs staff to refer the Mistful Park Urban Expansion Lands Planning Proposal to the Department of Environmental Planning, Infrastructure and Environment (DPIE) seeking a Gateway Determination without further delay, noting its consistency with the DUFHS.

We hope that the long delays in the assessment of our planning proposal lodged more than 2.5 years ago can now be progressed without further delay.

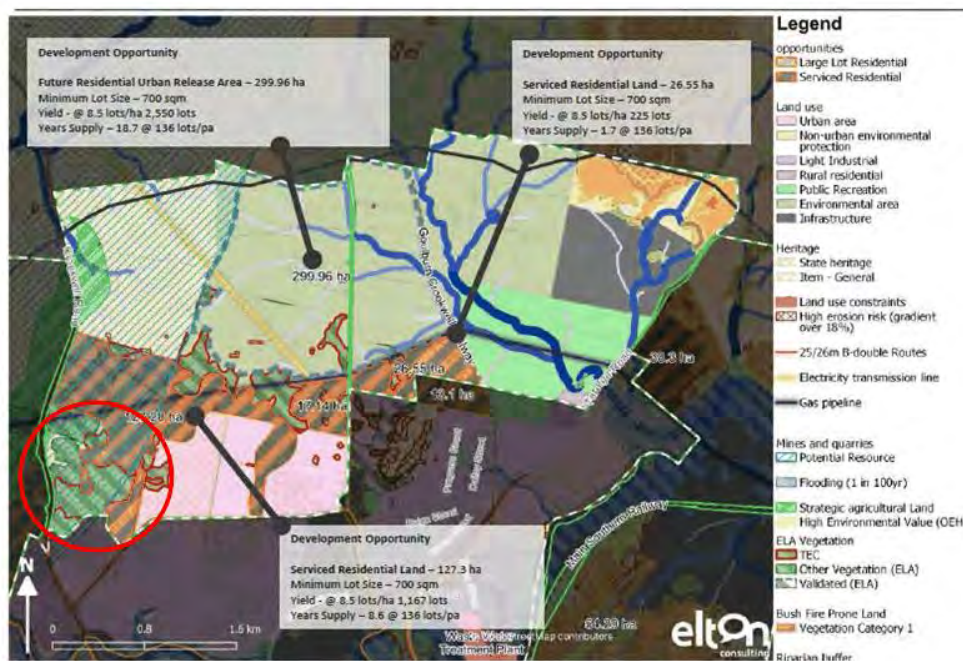
Kind regards

Wesley Folitarik
B. Environmental Planning (UWS); M. Property Development (UTS)
Managing Director | Urbanism

Figure 1 Vegetation Map Woodland Environmental (August 2017)



Figure 2 Constraints Mapping contained in DUFHS as informed by Council's 'Rapid Visual Validation'



From: Jeff Bulfin
Sent: Thursday,
To: Submissions <Submissions@goulburn.nsw.gov.au>; Council <Council@goulburn.nsw.gov.au>

rn Housing Strategy)

Dear Council

I refer to the above matter and email from Scott Martin to me on 24 April 2020.

The email referred to, as well as statements made by Council officer Scott Martin on the night of the meeting, indicated that, whilst not the only constraint, the proximity of the site to Sooley Dam was the primary reason that the land was excluded from the draft Housing Strategy.

I am now attaching a Preliminary Onsite Wastewater and Stormwater Management Constraints Assessment, prepared by Martens And Associates. Martens and Associates are considered experts in the field. The soil testing and analysis undertaken onsite in conjunction with the preparation of this report is very extensive, and the conclusions (outlined below) are very encouraging in support of the ability of the land to support development without adverse impacts on Sooley Dam.

In relation to wastewater, the report at section 3.3 concludes

1. There are **no significant constraints** to onsite wastewater management at the site
2. Sufficient land will be available within proposed lots to dispose of effluent in an ecologically sustainable manner such that the **NorBE test is satisfied.**
3. **No water quality impacts are expected on downstream water resources** provided that the subdivision layout is undertaken with care and in accordance with the constraints mapping undertaken herein.

In relation to water quality (stormwater), the report at section 4.5 concludes

1. Inclusion of appropriate water quality systems such as roadside swales, rainwater tanks and end of line ponds **would result in the achievement of a NorBE water quality outcome**
2. Transport of sediment, nitrogen and phosphorus **would be reduced from current conditions** and development of the site **would in fact have a beneficial impact on water quality** when compared to current rural grazing activities
3. There would subsequently be **no detrimental impact to the water quality entering the downstream Sooley Dam** as a result of a future large lot residential subdivision.

In light of the conclusions of this report, I wish to reiterate the proponent's position in relation to the inclusion of this land in the Goulburn Housing Strategy

1) The inclusion of this land into the housing strategy is not guaranteeing it will be rezoned. It is simply affording the owner the opportunity to pursue a pathway for rezoning, if he so chooses. It would be the owner's responsibility to undertake all the further studies and liaison with all the various Government departments to persuade them that the rezoning should proceed. All that is being requested of Council at this point is to include it in the strategy.

- 2) The proponent is aware that there are numerous constraints affecting the site. However, at his effort and cost, he is willing to investigate each and every constraint, as the process requires, without it becoming the burden of Council.
- 3) The reports relating to the rezoning process is at the full cost of the owner. The rezoning would not create any demand on the public purse.
- 4) The land is only about 1 kilometre from the edge of the existing residential area of Goulburn.
- 5) If the land is not included in the Housing Strategy, Council would be assigning it to be effectively sterilised from any productive use for possibly 20-30 years. Intensive Livestock Agriculture is not permitted in the zone. Intensive Plant Agriculture is permitted but the ability to control nutrient runoff is far less effective than a subdivision. This is confirmed by the Martens report. Extensive agriculture is permitted, but again it would result in animal droppings running into the dam.
- 6) The issue of demand is a commercial decision by the developer. However, it should be pointed out that if demand for this type of development (rural/residential) significantly increases over time, then including it in the strategy at least gives the option of helping to satisfy the demand, whereas if it is not included, the supply will not be available and the community would not be able to benefit from the growth that would otherwise occur.
- 7) In terms of housing targets, there is no guarantee that the areas favoured by the current DRAFT document will be able to be developed, due to the constraints not being fully investigated at this time. Further, some landowners may be unwilling or unable to develop their land at a time when the demand is there, which would mean that the Housing Strategy's housing targets will not be met.

I will be addressing Council again when the matter comes up for a decision. In the meantime, I urge Council to reconsider and include the land in the Housing Strategy.

I am available to discuss or meet with Council or Councillors at any time.

Kind regards

Jeff Bulfin M.B.A., B.Urb.Reg.Plan (Hons), MPiA, LREA
Principal Planner
Precise Planning

Quarry Developments inc. Craig's Hill

A.B.N. 47 905 190 707

Partners:**Jeanette.Shuttle****John.W.Craig**7th May 2020**Re Draft Urban and Fringe Housing Strategy.**The General Manager Emailed: submissions@goulburn.nsw.gov.au

Dear Sir,

With reference to the Council meeting held on the 21st April 2020 which resolved to defer the revised Draft Urban and Fringe Housing Strategy which allows further consultation with submitters ,we would like to provide additional information to our submission for consideration in the final assessment of this matter.

1. The Elton Consulting Comment/response in their report dated 8th April 2020 states that if the constraints are addressed and the land can be serviced council could consider a Planning Proposal , even though DPIE in their submission make recommendation and point to Ministerial Directions We would question this as the E3 zone came about in the 2007 LEP and DCP in 2009 and was drawn as a result of the Consulting Engineers Coffey & Partners Pty Ltd dated 3rd April 1986 re a detailed Slope Stability Investigation A/C Toorak Heights residential Subdivision for which the Council were supplied with a copy at the time.

This report as mentioned in our submission on the 16th December 2019 via Email from Quarry Developments inc Craig's Hill shows the area of land in the Stability Zonation plan from Southern Cross Consulting Surveyors (copy attached) ,we believe should only be restricted to the Zonation marked as pink even though a 4m wide easement goes through this zone to allow necessary water supply to allow developments which took place in William Alfred Place and Ivy Lea Place also part of the top water storage reservoir is in this area as well.

The DPIE we are sure would only be working from information supplied to them, though we would suggest that the area zoned E3 was incorrect from the start ie being included in LEP , DCP's and Cemetery Master Plans. We would ask if any consultant or engineering reports were carried out by GMC with reference to the E3 area in question before the E3 area boundary was

calculated and drawn as the area on the north end of the E3 zone and the west side should be changed to R2 as there is a big difference between 19.8 ha and 3.8h as in the submission letter dated 19th December 2019 .

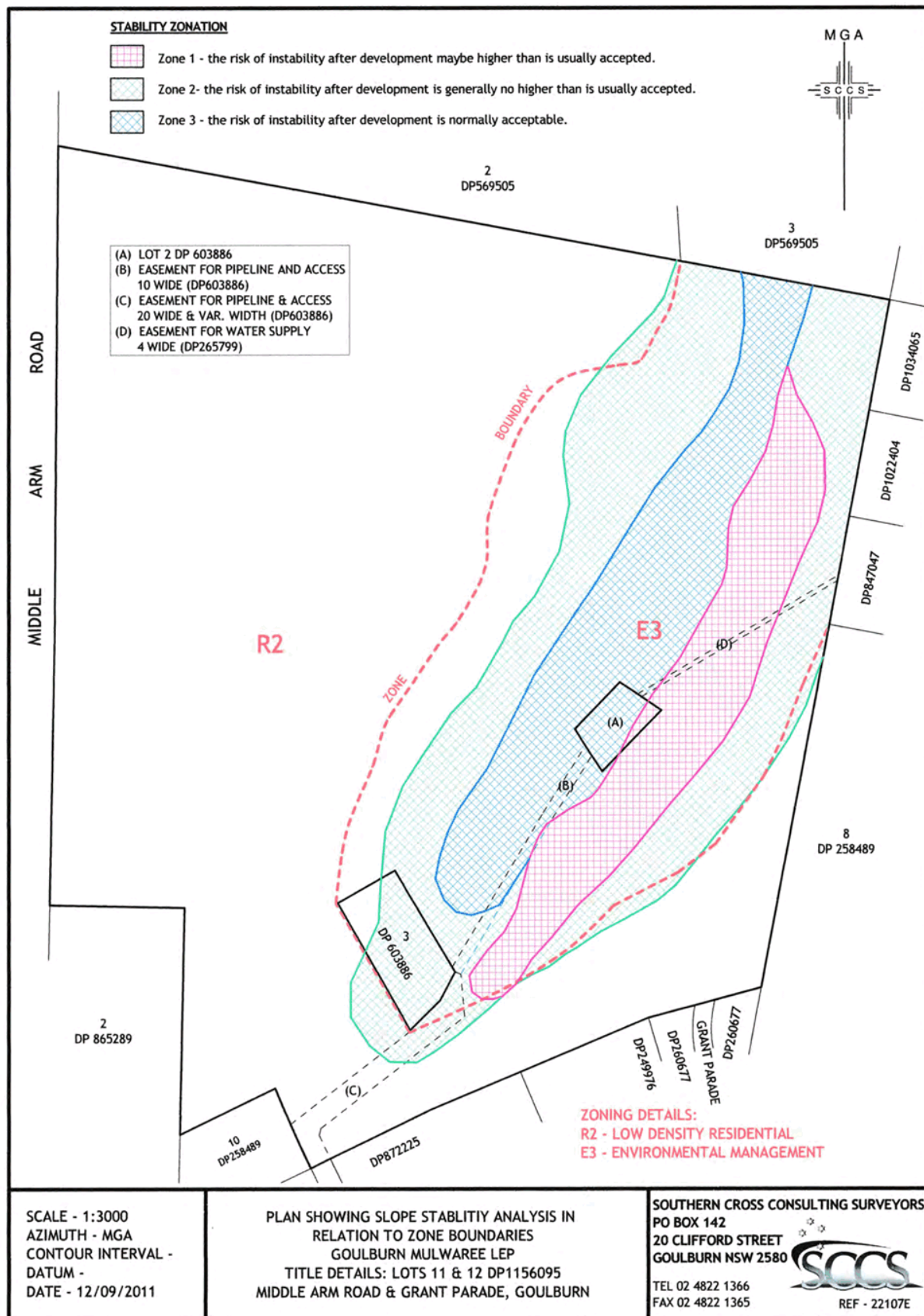
2 . References over the years re slippage and steepness has been exaggerated over a long period of time and as any tour of Goulburn would show building development on steep land and in some cases buildings on the ridge line is apparent please refer to photos in the main body of the email. Some of the streets being William Alfred Place, Ivy Lea Place, Snowgums Dr., Paton Pl ., Henry Street, and Red Gum Place just to name a few.

3. Engineering practices for building sites and water supply we assume in this day and age can overcome problems which may have been more of a problem back in 1985 or 2011. The Coffey report shows good building practices for sites on steeper land and would be addressed in any DA for this area.

We thank GMC for the opportunity to add further to the original submission and trust a favourable outcome from this additional information to the original submission.

Yours sincerely

— Ian Shuttle for
John Craig and Jeanette Shuttle
T/A Quarry Developments inc Craigs Hill



From:
Sent: Tuesday, 12 May 2020 11:04 AM
To: Submissions
Subject: Draft Urban and Fringe Housing Strategy
Attachments: IMG_20200510_0002.pdf

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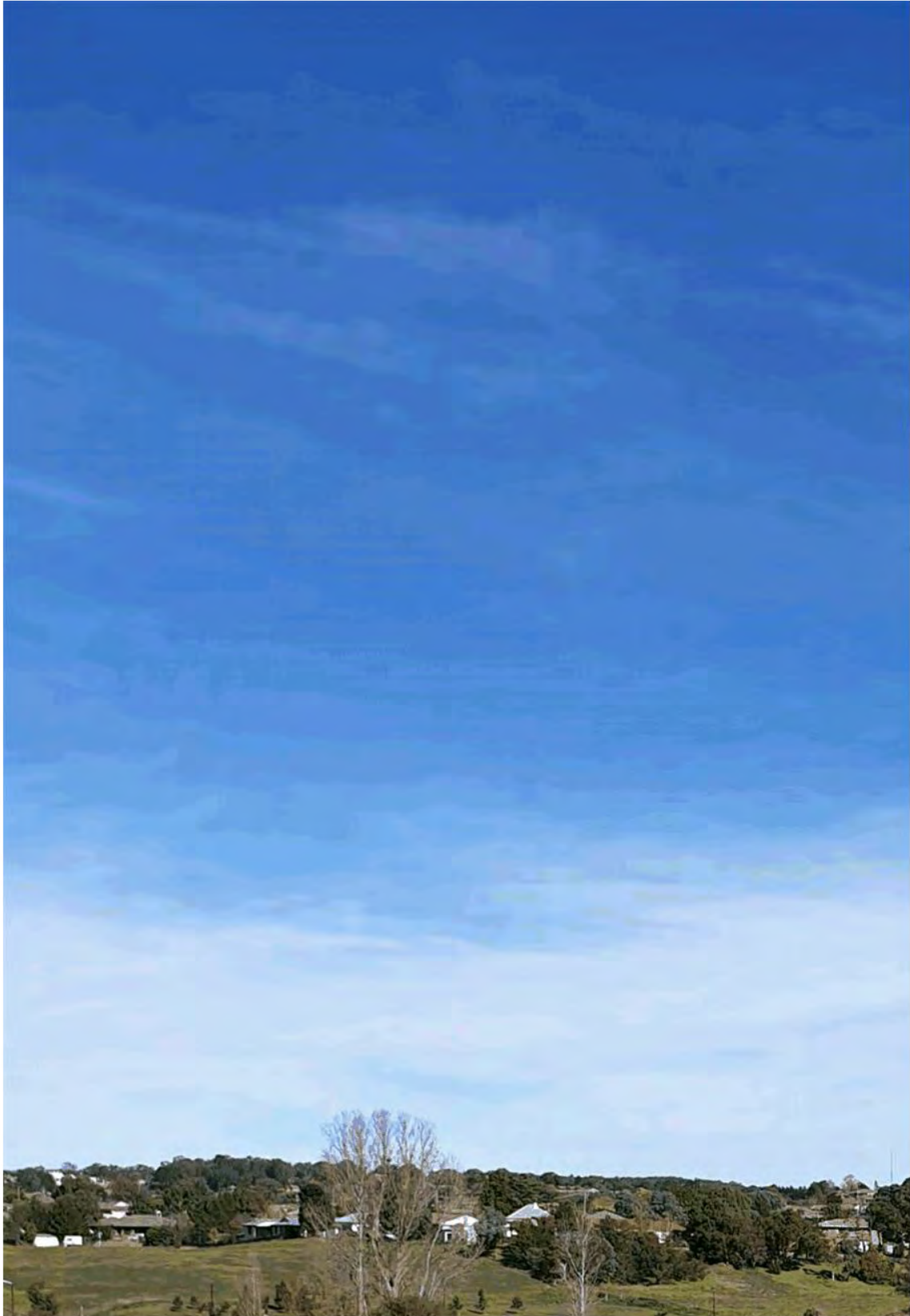




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12 May 2020

General Manager
Goulburn Mulwaree Council
Locked Bag 22,
GOULBURN NSW 2580

By email - submissions@goulburn.nsw.gov.au

Dear Sir,

DRAFT URBAN AND FRINGE HOUSING STRATEGY ("DUFHS")
Property - 17699 HUME HIGHWAY, TOWRANG (GOULBURN)

(Lot 3 DP 581727; Lot 1 DP 733070; Lots 2 & 6 DP 747969; Lot 20 DP 806869; and Lot 7 DP 1039599)

Reference is made to the letter dated 22 April 2020 received from Council to provide additional supporting information in relation to our submission to include the above-mentioned property ("**The subject site**") zoned RU6 Transition in Urban and Fringe Housing strategy.

We thank Council for giving us the opportunity to provide additional supporting information, but we could not get any investigations / studies done within the given time period of 3 weeks and willing to get appropriate studies done as and when requested by Council to support our request to include the subject site in this Housing strategy.

We hereby request Council to reconsider to extend the Urban and Fringe Housing Strategy to include the subject site to reduce the current minimum lot size of 20HA as per below to provide range of affordable lifestyle rural residential lots to meet the growing demand for these types of lots which is the reason to extend the original DUFHS study area to include additional sites.

- Option 1 - Rural residential lots with minimum lot size of 5HA around Riparian Corridors and 2HA in other areas (as per our request in Stage 2 Submission)

Alternatively, we propose the following option for Council consideration.

- Option 2 - Rural residential lots with minimum lot size of 10HA around Riparian Corridors and 2HA to 5HA in other areas (refer attached Proposed Lot size Sketch plan - Option 2)

Economic indicators and Government's immigration and refugee resettlement policies suggest that the population growth over next 20 years will be much more than the last 5 years average and also assumed housing demand of 3500 dwellings across LGA in the DUFHS because of Western Sydney Airport, settling migrants and refugees in regional areas and people moving from both Sydney and Canberra because of affordability issue.

Any additional yield from reduced minimum lot size as per above request is relatively small and will have very marginal impact on this Housing strategy for the reasons stated above.



Please find below information to address the key issues Council outlined in “Consultation Report – Urban and Fringe Housing Strategy” report dated 08 April 2020 for not considering the subject site part of stage 2 Housing Strategy.

Outside the investigation area:

We understand that the subject site is outside the original DUFHS study area but the investigation area has been extended to include number of other sites mainly in Mountain Ash and Brisbane Grove precincts including the sites on land zoned RU1 Primary production.

The subject site is surrounded by 420 Acres IN1 Industrial zoned land on the northern side and the small rural residential lots of 10 to 16HA lots on the eastern side i.e. existing land holdings in the immediate vicinity is effectively already fragmented (refer attached Property Surrounds Sketch Plan)

It is understood from the local commercial and rural residential property consultant that two of the properties zoned IN1 Industrial (2 x 80 Acre lots) across the road from the subject site have been purchased by the same buyer and is looking at buying the other big parcel, the total area of 420 Acres. Development of these properties will generate plenty of growth in the area and demand for 2HA to 5HA rural residential lots.

It is highlighted in the *Goulburn Mulwaree Strategy 2020*, that the Council is seeking to encourage population and employment growth across the whole of Goulburn Mulwaree and recognise the opportunities that may flow from the ‘tree change’ phenomenon, which has been stimulated by lifestyle choices and higher property prices in the Sydney metropolitan and coastal areas. We believe our request is not inconsistent with the *Goulburn Mulwaree Strategy 2020*.

Significant upgrades to Hume Highway would be required:

Access arrangements will need to be examined in more detail as part of any development in collaboration with RMS, but the subject site can be developed with no or very minimal upgrades to Hume Highway as the site has a frontage to the western side of Boxers Creek Road approximately 1,450m in length.

Access to Goulburn can also be gained via Boxers Creek Road which connects to Rosemont Road and then onto Windellama Road which does have the advantage of avoiding the Hume Highway.

We understand from the local consultant that only left in left out access from Hume Highway may be required in which case it requires 150 to 200m deceleration lane to have left turn access to the subject site.

Biodiversity, Flooding, Services etc

As stated in our Stage 2 Submission, impact on these can potentially be avoided by appropriate siting of houses and infrastructure once the appropriate studies are undertaken.

There are no reticulated water or sewerage services that are readily available. It is too small to be economically served by reticulated water and sewerage services and will not be the only site in the LGA without reticulated water and sewerage. There is sufficient space for on-site wastewater management – including the required buffer distance from watercourses.



We believe that there is considerable justification for including the subject site in the Urban and Fringe Housing Strategy based on the information provided in this letter and in our Stage 2 submission dated 17 December 2019.

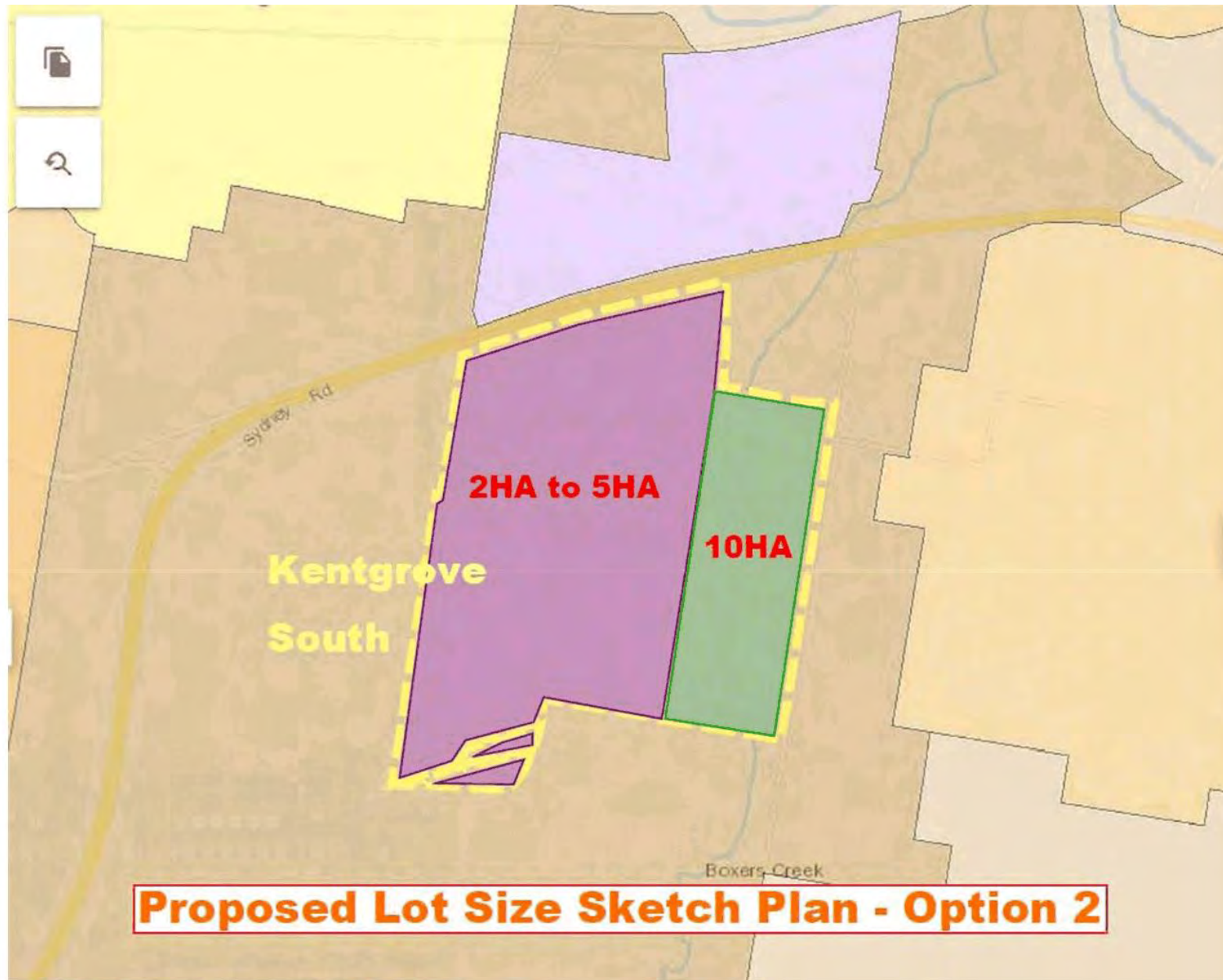
We hereby request that the Urban and Fringe Housing Strategy be extended to include subject site to reduce the minimum lot size from 20HA to have mix of 2HA, 5HA and 10HA rural residential lots to offer a mix of lots that respond to the subject site's landscapes / surrounds and growing demand for affordable lifestyle rural residential lots.

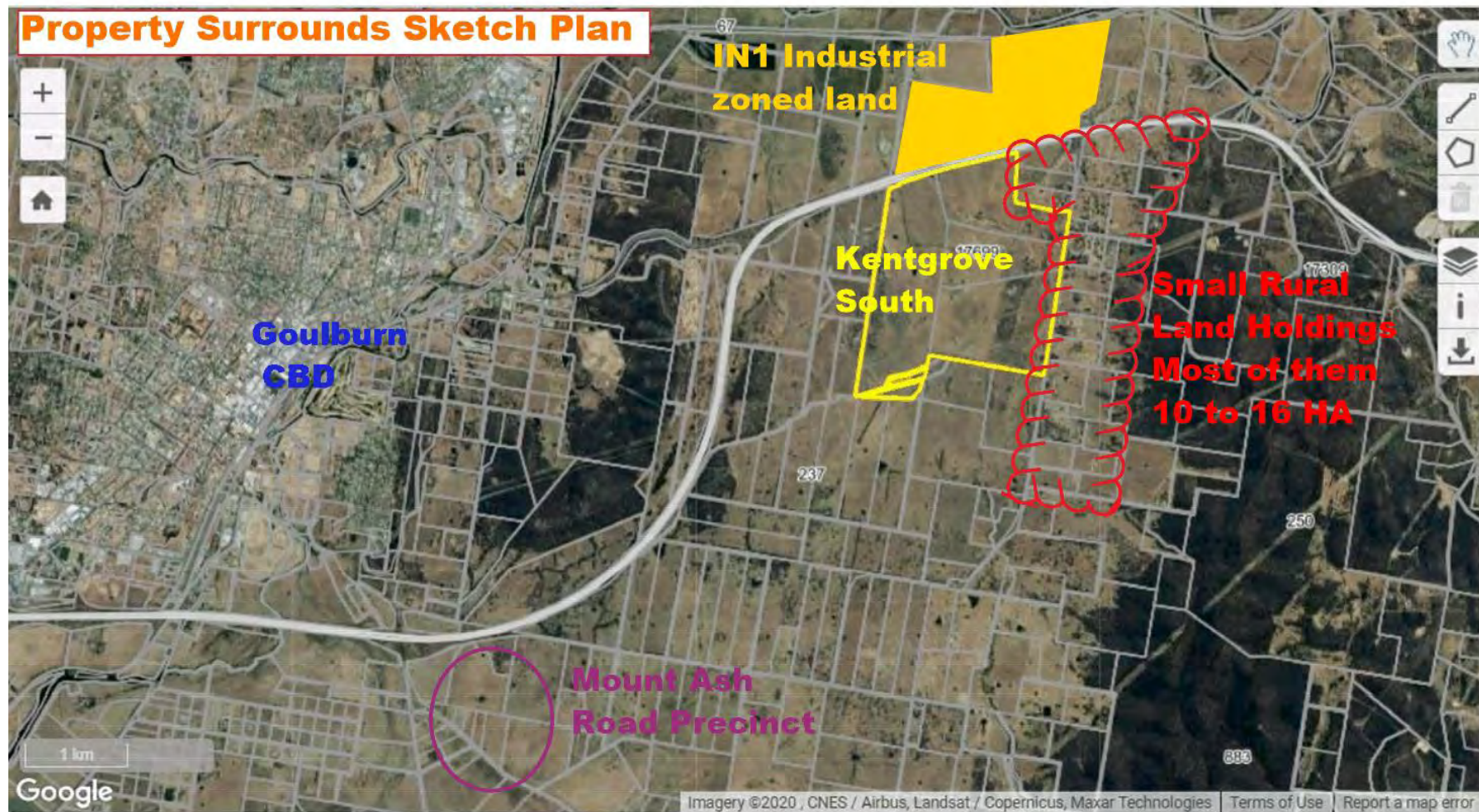
If you have any queries or require further information from us for inclusion of the subject site in the Housing Strategy, please contact me on 0414 537269.

Yours Sincerely,

Suresh Guduguntla
Kentgrove South Property Pty Ltd

Attachments – 1) Proposed Lot size Sketch plan - Option 2
 2) Property Surrounds Sketch Plan







11 May 2020

The General Manager
Goulburn Mulwaree Council

Via email: submissions@goulburn.nsw.gov.au

Dear Sir/Madam,

Gunlake Quarries Pty Ltd – The draft Urban and Fringe Housing Strategy Post Exhibition Report

Thank you for the invitation to submit further comment to the Draft Urban and Fringe Housing Strategy - Precinct Marulan North - Post Exhibition Review, following our recent presentation to Council. It is our understanding that these comments will be discussed at your briefing on Saturday 16th May 2020.

Gunlake built and paid for Ambrose Road on its own accord in order to avoid land use conflicts by keeping trucks away from residential areas. This Strategy, in its current form, will now bring residential areas to Gunlake's Transport Route, therefore we believe that the following motion must be endorsed and adopted by Council and included within the GMC Draft Urban and Fringe Housing Strategy Precinct 3 Marulan North to provide irrefutable and proper planning protections in perpetuity;

The GMC Draft Urban and Fringe Housing Strategy, Precinct 3 Marulan North recommendations are modified to include:

Gunlake Quarries be afforded the appropriate and legislated protections against any residential development within or adjacent to the Quarry and its Primary Transport Route consistent with NSW State Environmental Planning Policy (Mining, Petroleum and Extractive Industries) 2007. Such protections must include, but not be limited to: -

- A minimum 250 meter buffer in the form of an easement/restrictive covenant that prohibits any kind of development between Precinct 3 Marulan North and Ambrose and Red Hills Roads, from its junction with Brayton Road to the Hume Highway.
- No vehicular access to ever be allowed to Ambrose or Red Hills Roads from Precinct 3 Marulan North.

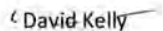
Head Office:
Level 2, 53 Cross Street
Double Bay NSW 2028
Ph: 02) 9363 1744

In support of this we provide additional background information below as recently presented to Council: -

- Gunlake is a 100% Australian family owned company. The Marulan Quarry has in excess of 100 years of reserves and was first approved in 2009 and is a State Significant Development under the NSW State Environmental Planning Policy (Mining, Petroleum and Extractive Industries) 2007 (SEPP 2007).
- The Gunlake Marulan workforce currently exceeds 45 local-onsite-fulltime-employees, plus an additional 90 indirect jobs, associated haulage contractors or local and regional companies that supply us with ongoing services. It's also important to note that in the current Covid 19 pandemic we have not cut our staff like our competitors.
- Gunlake is also very proud of our involvement and support of local community events and programs. We are major sponsors of and contributors to numerous community events and projects in and around Marulan as well as being one of the major contributors to the Goulburn District Education Foundation.
- Quarries cannot operate without their transport routes and they are an essential part of the quarry operation. No transport route equals no quarry.
- Council staff talk about this being a high level planning document and that there is a long way to go on this strategy, but the reality is as soon as Council adopt this plan it becomes reality.

We would like to invite you all to a site visit of the Quarry and Transport route at a convenient time within the 3 month deferral, so that you can gain a visual understanding of our operation in respect to our concerns and future ramifications of the strategy for Precinct Marulan North, and are available to meet at your convenience.

Yours faithfully,


David Kelly
Head of Development

Mr Warwick Bennett

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Goulburn-Mulwaree Urban and Fringe Housing Strategy Submission Posthibition Report

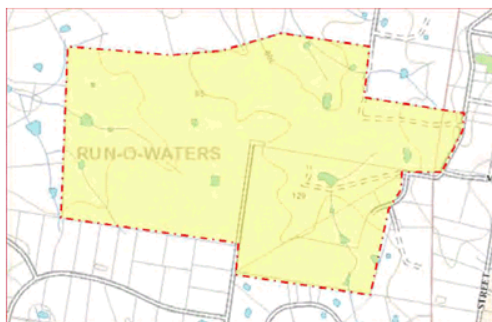
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12 May 2020

Mr Warwick Bennett
General Manager
Goulburn Mulwaree Council
85 Deccan Street
Goulburn NSW 2580

By email

Dear Mr Bennett

**RE: DRAFT URBAN AND FRINGE HOUSING STRATEGY (DUFHS)
SUBMISSION ON BEHALF OF GORMEN PTY LTD, GLENROCK
PROPERTY (248 HIGHLAND WAY MARULAN Lot 204 DP 870194, Lot 1 DP
1174575, Lots 5,6,7 DP 855762) (Glenrock)**

This submission – form

This submission is made on behalf of the owner of Glenrock in relation to the DUFHS, pursuant to Council's letter of 22 April 2020.

For the convenience of Councillors and staff this submission incorporates our client's earlier submissions of 21 February 2019 and 6 December 2019, meaning that no cross-referencing to those earlier documents is necessary and this document may be read on a stand-alone basis.

The submission is in three parts:

1. This covering letter.
2. Part A: our detailed submission and reasons in support.
3. Part B: accurate, factual comment on the submissions received by DPIE, Water NSW and Boral – the submissions which form the basis of the present recommendation to remove entirely the Marulan South precinct (now Marulan East) and the adjoining portion of Glenrock land from the DUFHS (together forming the **Relevant Land** as depicted in Appendix 1 to this submission).

This submission – substance

We summarise this submission as follows:

1. The inclusion of the Relevant Land is value accretive to the community and entirely consistent with the DUFHS. Its inclusion has previously been identified as high priority.
2. The strong policy, economic and social reasons in support of the inclusion of the Relevant Land are detailed in Part A of this submission.

3. The stated reason for the recommendation presently before Councillors to exclude the Relevant Land is fundamentally flawed: it rests on three external submissions which have been completely mischaracterised and misrepresented to Councillors by the Business Manager Strategic Planning. This is evidenced by the facts detailed in this submission, particularly in Part B.
4. That recommendation does not benefit the community; it is prejudicial to it. The only party which the recommendation benefits is Boral. It does that by accepting, without question or scrutiny, the demonstrably incorrect position advanced by Boral. In so doing, it places Council in the invidious position of effectively acting as Boral's agent to advance its commercial interest in further isolating existing mining operations by retarding the social and economic development of the community.
5. It would be an extraordinary position if Council supported a major listed company at the expense of the community by enabling that company to prevent the legitimate inclusion of the Relevant Land in a strategy designed for the long term social, economic and residential welfare of the community – especially given the Relevant Land does not even adjoin Boral's land or have any proximity or bearing to its operations. Yet that is the effect of the Business Manager Strategic Planning's recommendation now before Councillors.
6. Councillors should **not** have been placed in a position where they have been asked to support such a recommendation at the expense of both the community and their own reputations.
7. Exclusion of the Relevant Land would deprive the community – for a period in practical terms in excess of 20 years – from the potential to develop in a consistent, cohesive and sympathetic way along Highland Way, an existing residential corridor and an integral part of the Southern Highlands Tourist Drive linking nearby towns which would benefit both commercially and socially from an increase in large rural residential lots over time.
8. By including the Relevant Land in the DUFHS Council would be acting in the best interests of the community and loses nothing: even if land is included it cannot actually be redeveloped without a comprehensive planning proposal. Any such future proposal would need to be approved by Council at the relevant time. Council therefore retains control.
9. By contrast, by excluding the Relevant Land from the proposal Council would be acting in the best interests of Boral at the expense of the community.
10. For all of the above reasons, the Relevant Land should be included in the DUFHS.

Factual detail in demonstrative of the above follows in the remainder of this covering letter and in parts A and B of this submission.

Relevant development of the DUFHS

It is useful to detail the following relevant aspects of the development of the DUFHS.

"Round 1"

Our client's initial submission on 21 February 2019 was made in response to oral advice received from Council staff that "all land East of the Hume Highway" was to be excluded from the DUFHS. The submission questioned the arbitrary exclusion of all

such land in circumstances where there were sensible community, economic and policy reasons for including such land within the DUFHS. Those reasons were detailed in that submission.

"Round 2"

The DUFHS subsequently evolved: the materials placed on public exhibition, particularly the 50 page summary provided by Council, indicated support for removing from the DUFHS all land east of the Hume Highway. But, contrary to that document, the 300 or so page Elton report actually included within the DUFHS land East of the Hume Highway. Specifically, land along Highland Way right up to the border of Glenrock was included but immediately adjoining land with exactly the same features and frontage to Highland Way forming part of Glenrock was excluded. Our client's detailed submission had been excluded from the Council papers and the review process.

The above exclusion of our client's land and of its submission from the entire review caused our client significant concern including from a fundamental policy and fairness perspective. We were grateful at the time for the prudent and correct course adopted by the General Manager to remove and defer the item from the Council's agenda given the failure to include our client's submission. The exclusion of the relevant Glenrock land, and the further policy reasons for its inclusion, is the subject of our written submission of 6 December 2019.

Part A of this submission details the substantial policy, social, community and economic reasons in favour of inclusion of the Relevant Land. We note in that respect the in-principle agreement expressed during our meeting of 12 December 2019 that the same land along the same stretch of Highland Way should be treated in the same way: i.e. if the Marulan South land is included then the immediately adjoining portion of the Glenrock land along the same stretch of Highland Way should also be included (and of course the reverse assumption also applies, i.e. that if the Marulan South land is excluded then the adjoining portion of the Glenrock land would also be excluded).

"Round 3"

The DUFHS has recently evolved again, now to recommend exclusion of all land along Highland Way, i.e. the Marulan South precinct (now Marulan East) and the Glenrock land immediately adjoining it. The reason cited by Council's Business Manager Strategic Planning for this recommendation is the submissions made by Boral, the Department of Planning, Industry and Environment (Geoscience) and Water NSW. This is the only reason cited for the proposed exclusion of the Relevant Land.

The recommendation to exclude the Relevant Land is fatally flawed because it is based on a complete mischaracterisation and misrepresentation of the submissions made by each of those three parties. That specific issue is detailed further in both this covering letter and in **Part B** of this submission.

Context

Our client has asked us to reconfirm that which it has already confirmed to Council in our previous submissions and in person during our December 2019 meeting:

Our client is not a property developer. It has zero interest or desire in seeing Glenrock or any part of it altered from productive agricultural land, which has operated continuously as a beef production business for over 200 years, to residential land. On the contrary, its directors have devoted substantial time, effort and resources to increasing the property's size over the last several decades with the aim of increasing

its agricultural production and retaining a substantial curtilage around the historic homestead and other buildings. Its aim is therefore to protect Glenrock and ensure that any future residential redevelopment occurs in a manner sympathetic to both the property and the community.

Our client is a longstanding member of the community with a passionate belief in the best interests of the community, as previous experience in relation to a previous proposed development demonstrates. From a community perspective, our client wishes to ensure, if there is any future redevelopment, that it occur in a manner which benefits the community and which does not encourage speculative for-profit property development of the type which has occurred previously and which has the undesirable consequence of producing the greatest return for the developer and the least value for the community.

Further, as a matter of basic principle and fairness, our client does not wish to see inclusion in the DUFHS of land immediately adjoining its own while its own land in the same immediate vicinity with exactly the same characteristics, the same frontage to Highland Way and the same bordering of the main Southern Railway is excluded from the DUFHS.

For those reasons our client considers that it is able to make these submissions with both a degree of objectivity, as it is removed from the mercantile and commercial need to make a profit which drives developers, and with some first hand knowledge of the Relevant Land and the considerations applicable to it.

Current status and problem

The Relevant Land is depicted in Appendix 1 to this submission.

The current status is that the Relevant Land has now been recommended for exclusion from the DUFHS. That recommendation has been stated to be based wholly on the three submissions referred to above (from Boral, the DPIE (Geoscience) and Water NSW).

No other reason for the exclusion of the Relevant Land has been advanced by Council's Business Manager Strategic Planning.

The problem with the recommendation to exclude is twofold:

1. it removes – for at least the next 20 years and most likely much longer in practical terms – from potential residential supply a substantial area of land which by virtue of its placement along Highland Way, an existing residential corridor, and its specific topographical and other characteristics is ideally suited to large rural residential lots; and
2. the recommendation relies for its basis and justification on the above submissions: the Council's Business Manager Strategic Planning has clearly stated that the recommendation to exclude the Relevant Land is made because of these three submissions. But the Business Manager's reading of those submissions is substantially flawed and her analysis of them is completely incorrect. *Put plainly:*
 - (a) *the State Agency submissions themselves do not say what Council's Business Manager Strategic Planning says they say – indeed one of them says the direct opposite; and*

- (b) *the Boral submission is palpable nonsense which the Business Manager Strategic Planning should not be asking Councillors to support at the expense of the community and their own reputations.*

As a result, the General Manager and Councillors have received incorrect information.

Worse, on the basis of that incorrect information, Councillors are being asked to support a flawed recommendation to exclude the Relevant Land from the DUFHS.

If Councillors were to do that and rely on the recommendation before them to make a decision to exclude the Relevant Land they would be acting in error and be doing a disservice to the community.

That is a problem which this submission seeks to solve. To that end Part A of this submission details the many policy and community benefit reasons in support of inclusion of the Relevant Land within the DUFHS and Part B corrects the incorrect information referred to above and provides accurate facts as to the three submissions referenced above.

Specifics

It would not be fair or reasonable to make the above comment without demonstrating why it is correct. The following does so briefly and Part B this submission does so in more detail, by reference to the actual submissions made by each party as provided by the General Manager.

The Department of Planning, Industry and Environment (Geoscience) (DPIE) submission

Contrary to the comment of Council's Business Manager Strategic Planning, this submission does not indicate that the DPIE has a concern with the inclusion of the Relevant Land at all. On the contrary: the DPIE submission specifically states the following: *"The Division has no concerns with the Marulan South area (north of the main Southern Railway)..."*. This is precisely the area comprised by the Relevant Land, all of which is north of the main Southern Railway.

The DPIE submission therefore actually states the opposite of what the Business Manager Strategic Planning has indicated.

In circumstances where the DPIE itself has clearly stated that it has no concerns with the inclusion of the Relevant Land within the DUFHS we do not understand why the Post Exhibition Review authored by the Business Manager Strategic Planning overtly mischaracterises the DPIE's submission and its position on the inclusion of the Relevant Land by attributing to the DPIE the opposite of what it in fact has said.

The Water NSW submission

Likewise, the Water NSW submission specifically recognises the potential suitability of the Relevant Land to large residential lot housing. It also accurately recognises that the DUFHS is merely a strategy – not a planning proposal – and that as such it is not definitive and a lot more work would be required before any party included in the DUFHS would be able to subdivide any land and as rural residential lots or otherwise.

The Water NSW submission does not raise any substantive issues at all: it, again, correctly and appropriately recognises that at this time there can be no legitimate exploration of substantive issues because there is as yet no planning proposal. The submission therefore merely flags general principles.

Moreover, Water NSW is aware that Council has already allowed a number of unsewered large residential lot developments east of the Hume Highway in close proximity to Highland Way. This is recognised in the expression of a general preference for reticulated water and the subsequent specific statement by Water NSW in direct reference to the Marulan area (in which the Relevant Land is located) that: *"Water NSW would welcome the opportunity to discuss with Council whether this area might be more suitable in providing a limited supply of Large Lot Residential housing"*.

The concerns raised by Water NSW are prudent, completely usual and no more than expected at an early stage conceptual level. They would need to be balanced against the specifics of any future planning proposal – the submission of which would be mandatory – for any land included in the DUFHS which is sought to be developed.

Water NSW has made a general conceptual submission and even in that context it has expressly recognised the suitability of the Marulan area which includes the Relevant Land for future supply of large lot residential housing. It follows that there is no legitimate or reasonable basis to suggest that this submission forms a valid basis for excluding the Relevant Land from the DUFHS: the opposite is in fact the case.

For completeness we note that any concerns of Water NSW would need to be satisfactorily addressed at the time a planning proposal is made. That is **not** a reason to exclude the Relevant Land from the DUFHS ab initio, nor a justification for doing so. Indeed, excluding the Relevant Land on such a basis would be to render nugatory the whole planning proposal process, which is specifically designed to ensure such concerns are properly addressed before any consent to any actual proposal is given. As noted above, Council remains the arbiter of any future consent process.

In view of the above the recommendation to exclude the Relevant Land on the basis of the Water NSW submission is, as with the DPIE submission, nonsensical. To do so would be to deprive the community of the benefit of sensible and desirable future potential development. That would be a particularly bad policy outcome.

The Boral submission

The Boral submission is self-serving nonsense from start to finish. It is designed to place Boral's commercial interests before the interest of the community, nothing more. In the attempt to obtain that outcome Boral is effectively asking Council to act as its agent against the community. If Councillors follow the recommendation to exclude the Relevant Land that is what they would be doing.

The truth of the above is irrefutable, as indicated by the facts, matters and circumstances contained in Part B in relation to the specifics of the Boral submission.

The resultant position

It is not clear how the above submissions have been depicted as they have been contrary to their actual content (in relation to those from the State Agencies) or why the Boral submission has been given substantial weight, when it should be given none, while the entire substance of our previous submissions has been ignored.

Neither of the State Agency submissions (DPIE and Water NSW) has been accurately portrayed in the Post Exhibition Review provided to the General Manager and Councillors – as detailed above and in Part B of this submission.

As far as the Boral submission is concerned, the above conclusion is inescapable on any objective analysis, as Part B of this submission demonstrates.

It would be most inappropriate for Council to exclude the Relevant Land because Boral wants less rather than more people in the community for its own commercial interests and against community benefit.

Councillors are being asked to adopt a recommendation to exclude the Relevant Land on false pretences and completely inaccurate information, the effect of which would be to short-change the community and prefer the private commercial interests of a public company whose operations are nowhere near, and not affected by, the Relevant Land.

The undesirability of such an outcome for all concerned is obvious.

Progression

We urge Councillors:

- (i) not to accept the fruit of such poisoned logic;
- (ii) to reject the recommendation to exclude the Relevant Land; and
- (iii) to include the Relevant Land within the DUFHS.

Inclusion in the DUFHS would enable a planning proposal to be advanced to Council in the future. Any such proposal would need to satisfy Council's criteria as specified at that time and would have to stand or fall on its merits at that time. But importantly, inclusion of the Relevant Land leaves the option open for such a proposal to at least be properly put and it gives the community the opportunity to potentially expand and develop consistently and sympathetically during the next 20 years.

Our client's hope is that the Relevant Land will be included in the DUFHS as a beneficial and sensible course which is value-accretive to both the DUFHS and the community as a whole.

We and our client would welcome the opportunity to meet with Councillors and present to Council on any aspect of the above and Parts A and B of this submission which follow, as Council desires.

We look forward to progression of this matter to a positive and productive outcome for the community.

**DENIS SMITH
PRINCIPAL, DIRECTOR
TOMASY PLANNING**

PART A**DETAILED SUBMISSIONS AND REASONS IN SUPPORT****Scope of submission**

Our submission is made in support of including in the DUFHS the small section of Glenrock property immediately adjoining the area of land on Highland Way together with the Marulan South precinct (now known as Marulan East); the total forming the Relevant Land as defined above and as depicted in Appendix 1.

Our client does not make any submission at this time in respect of that section of the Glenrock property which abuts Long Point Road. Therefore, this submission is made only in respect of inclusion within the DUFHS of:

- (i) that section of the hatched Glenrock property which immediately adjoins the neighbouring land marked as Marulan South in Appendix 1; and
- (ii) the Relevant Land (being all of the Glenrock and Marulan South land specifically identified in the hatched section depicted in Appendix 1).

Our earlier submissions

Our earlier submissions were provided on 21 February and 6 December 2019. They were a response to:

- (i) Glenrock's omission from the DUFHS and the oral advice provided to the writer by Council that all land east of the Hume Highway would be excluded from the DUFHS (21 February) and
- (ii) Glenrock's subsequent exclusion and the exclusion of our submission entirely from Council's reporting and consideration of the DUFHS (6 December).

They set out our concerns in arbitrarily omitting large areas of land well suited to redevelopment within the DUFHS, especially in the context of increasing demand and other developments approved by Council east of the Hume Highway. They also sought inclusion of appropriate sections of the Glenrock property within the DUFHS and set out the basis for that and the reasons in support.

As our earlier submissions detailed, sections of the Glenrock property along Highland Way meet the necessary criteria for being included in the DUFHS and in particular for rural redevelopment. Many of the reasons for that detailed in our earlier submissions have also been confirmed in Council's response.

Post Exhibition Review Report

On 1 October 2019 a report was prepared by Council's senior management team entitled *Draft Urban and Fringe Housing DUFHS – Post Exhibition Review*. That report did not acknowledge that a submission had been made on behalf of the Glenrock property and its owner and the report therefore failed to have regard to any of the matters in our submission. That omission was dealt with by the report being pulled from the Council's 1 October meeting with the matter being deferred for consideration at a later time. While grateful that the matter was dealt with in that way, it is of concern to our client that its submission and its objections to being excluded from the DUFHS were ignored.

Consultant reporting

We have reviewed in detail all of the materials now provided by Council for public exhibition.

To broadly summarise the position: those materials indicate support, without any reasons articulated, for the position that the DUFHS exclude land east of the Hume Highway. Indeed, if one read only the 50 or so page summary – which we suggest most people will do rather than reading the 300 page actual report – that is the impression one would have.

Then, in the detail of the 300 or so page Elton Consulting report it becomes apparent that not all land east of the Hume Highway is being excluded: there is one identified area of land, comprising 4 lots, which is included. Moreover, that land has been identified as High Priority meaning a supply lead of 12 to 18 months. Leaving aside the inherent contradiction in the reporting, this and the factors below, raise some concerns for our client, Glenrock and the community.

The then-identified land:

- (a) is stated to comprise 85.5 hectares;
- (b) has been identified as suitable for inclusion in the DUFHS as large lot residential development i.e. 2 hectare parcels of land;
- (c) is stated to have a capacity of 30 such dwellings and parcels;
- (d) has been identified as 'High' priority so as to be made available in 12 to 18 months; and
- (e) is not only east of the Hume Highway: it directly abuts and immediately adjoins the Glenrock property. Moreover, it has the exact same topographical, ground coverage and other characteristics as the Glenrock land which it adjoins.

The Elton report speaks of stakeholder consultation and engagement yet at no time was there any attempt to consult or engage with this office or Glenrock despite our early and consistent engagement with Council and our detailed February submission. Put simply, we consider that the report is deficient insofar as its inclusion of the land east of the Hume Highway immediately adjoining Glenrock and its simultaneous failure to include the section of Glenrock land which has exactly the same characteristics.

That said, the Elton report represents merely the current status of consultant reporting. The final decision rests with Council and we therefore sought inclusion within the DUFHS of a small portion of the Glenrock property on the same basis as the land immediately adjoining Glenrock referred to above.

Our meeting of 12 December 2019 with Council then confirmed an in-principle acceptance of that position on the basis that either the relevant portion of Glenrock land should be included if Marulan South was included, or excluded if Marulan South was excluded (as is currently recommended). In other words, there was an in-principle acceptance of the suggestion that since the land in question is in the same vicinity, with the same geographical and topographical characteristics, sharing the same frontage to Highland Way and the same proximity to the main Southern Railway that the Relevant Land should either be included or excluded as a whole and **not** with differential treatment only excluding the Glenrock portion. That position is one which is obviously fair and reasonable.

Reasons in support (February)

The reasons in support were stated in our February submission as:

- (a) Close proximity to both Tallong and Marulan villages (less than 5 minutes drive to either).
- (b) Close proximity to the existing rural residential lots near and around both, and also along each of Highland Way and Long Point Road. Equally close proximity to the various rural housing redevelopments which have been approved in the immediate and surrounding locale (such as Glenrowan Green which is less than 5 minutes' drive).
- (c) Substantial dual road frontage both on Highland Way and Long Point Road enabling direct access to and from lots without the need for an additional public road system.
- (d) Ability for direct provision of services to residential lots, again without a requirement for an additional public road system.
- (e) Relevant land is already cleared of vegetation enabling development to occur without damage to or interference with vegetation, natural species or flora or fauna.
- (f) Commensurate low bushfire risk on the subject land due to its cleared nature.
- (g) The property is a natural growth corridor servicing both Marulan and Tallong and associated villages by virtue of its location and noting that Marulan has already been identified as a future growth area.
- (h) On both Highland Way and Long Point Road (and adjoining roads like Caoura Road) there are already a substantial number of rural residential developments so redevelopment of the defined area for Glenrock would be consistent with the existing character and use of the area.
- (i) Close proximity to the established main southern railway line with existing station infrastructure at both Marulan and Tallong allows easy and effective access to transport into the Sydney CBD and other satellite developments.
- (j) The existing single ownership structure means the land can be cohesively and efficiently subjected to the assessment process without the inherent waste and diffusion of resources that result from the more usual situation where subject land is held by a number of owners.
- (k) The ability to meaningfully add to the increasing demand for more housing stock in a manner which provides a first-class land release which therefore provides a public benefit without any public or environmental detriment (given the release would be consistent with existing land use and the existing character of the location, and given the nature and character of the land itself as referred to above).

Those reasons have not changed. They are factually correct and consistent with the planning criteria, as demonstrated by the previous inclusion of the 85.5 hectares of land immediately adjoining the same section of the Glenrock property referred to above.

Further, the above reasons have been added to and supplemented by the reports provided on the DUFHS and otherwise as detailed below.

Further support within the DUFHS reports

In addition to the reasons stated above, the DUFHS reports released in October 2019 and subsequently also demonstrate and justify the need for additional rural residential development of the type identified above for the Relevant Land, including in the following specific references:

Page 7 – Item 3, Housing Demand:

"Anecdotal evidence gained through the initial community and stakeholder engagement process indicated demand for large lot residential blocks (2ha). These products offer diversity in lifestyle choice. The relatively low subdivision costs associated with creating these lots has resulted in this form of development being the preference of proponents looking to rezone land. Given the current and expected demand for residential land in Goulburn and Marulan it would be anticipated that small volumes of large lot residential land will be absorbed by the market, however, the actual annual demand is difficult to determine."

Page 9 – Item 4.2, Large Lot Residential Demand:

"The overall dwelling approval data has not been sensitised for the split between approvals on 1 - 2ha large lot residential lots, compared to approvals for serviced residential lots. However, a review of Council data suggests that there is reasonable demand for rural residential development on the fringe of the study area."

Page 9 – Item 5.1 – Large Lot Residential Supply:

"Based on the current data, 290 lots have been created in the R5 Large Lot Residential zone in the past ten years in Goulburn. Over this same period, approvals have been granted for 200 dwellings. This indicates that there are at least another 90 vacant lots in the R5 zone. Based on the historic conversion or take up rate (lots to approved dwellings) of 20 per annum, this would suggest around 4.5 years supply of large lots in Goulburn...Marulan has a much more limited supply of R5 Large Lot Residential zoned land."

Page 12 – Item 5.2.2 – Marulan

"Marulan will need to ensure that sufficient land is identified and preserved for future urban residential zoning. Council could consider rezoning this area with an Urban Release Area provision and concept plan that demonstrates the arrangement of larger lots (>2 ha) such that they can be efficiently re-subdivided in the medium/long term."

Additional applicable reasons in support and consistency with the DUFHS

There are substantial additional reasons in support of including the Relevant Land, beyond those specific report sections referred to above. They include the following:

1 Consistency with DUFHS

Inclusion of the Relevant Land and, specifically, the section of the Glenrock land immediately adjoining the 85.5 hectares previously included in the DUFHS

is consistent with the DUFHS and is supported by all of the reasons stated. With respect we do not agree with Kate Wooll's comment that our client is in the same category as people who own land in Goulburn who are asking to be included in the DUFHS. That comment is really quite extraordinary given the relevant section of Glenrock land immediately adjoins the neighbouring 85.5 hectares previously recommended for inclusion and has all of the same characteristics as noted above. It is, with respect, nothing whatsoever like "people who own land in Goulburn" (some 40 or more km away) being asked to be included within the DUFHS. There is simply no similarity or analogy.

2. *Not undermining future residential land opportunities*

Inclusion of the relevant section of the Glenrock property within the DUFHS on the same basis as the 85.5 hectares previously recommended for inclusion would not undermine future residential land opportunities. On the contrary, it would augment them.

3. *Absence of land use conflict*

The development can be managed to avoid land use conflict. Large Lot development should have regard to the surrounding agricultural land use and must provide a buffer to agricultural land. The railway is a definitive boundary between the large lot residential development proposal and the rural land to the south which is used for agricultural purposes.

4. *No flooding*

The site is unconstrained by flooding as it is above the flood planning level of the 1 in 100 ARI. The area is not affected by flooding and has unconstrained flood free access out of the property and locality.

5. *Connection to existing road network*

The lots can be connected to the existing road network by sealed road access. The area can be connected to the existing sealed road network by sealed road access and is fully serviced by a sealed road and within the existing rail corridor.

6. *Demand*

The need for the additional lots can be justified in terms of supply and demand especially given the long term nature of the DUFHS. This is already demonstrated clearly by the previous identification of the immediately adjoining 85.5 hectares as 'High' priority.

As a matter of commercial reality, the market should be left to decide based on any planning proposal at the time (and the conditions required by Council to approve it) whether the product succeeds or fails. As such the demand-side equation can only add value to the community as all of the risk is with the applicant in any such future planning proposal. But if the Relevant Land is excluded then the community is deprived even of the opportunity to meet demand if it is there. That would be a nonsensical economic and social policy outcome completely against the community interests.

7. *Council retains control*

No development may occur on any of the subject land without the provision of a comprehensive planning proposal to Council and without Council consent. Any such proposal would need to be assessed against the DUFHS, the relevant controls and Council's processes and criteria at that future time and Council would need to provide its consent before the proposal were able to be advanced to the DPIE.

Without Council support at such future time such a proposal would not be able to be advanced.

Council therefore retains control and loses nothing by including the relevant portion of Glenrock land along Highland Way and the Relevant Land in its entirety within the DUFHS – on the contrary, Council will be ensuring that the area east of the Hume Highway previously identified as suitable for inclusion in the DUFHS as high priority will actually represent a meaningful contribution to future land use rather than only the 30 additional lots currently identified. After all, if those lots are 'High' priority, it must follow that lots of exactly the same nature immediately adjoining them are also necessary and desirable.

8. *A meaningful number of lots*

By including the Relevant Land within the DUFHS Council will be ensuring there is a meaningful number of lots along Highland Way, an existing residential corridor, included within the DUFHS. This will alleviate supply pressure given the identification of the previous relevant area as 'High' priority. We note that if the Glenrock portion had been excluded from the Relevant Land as previously contemplated only 30 lots would have been available.

9. *Practical utility: cost and efficiency*

From a practical perspective, there is a real utility to including the Relevant Land along Highland Way and, once again, this utility would be substantially diminished if not lost were the Relevant Land not included as a whole (i.e. the area defined in Appendix 1 as Marulan South and the hatched area of the Glenrock land): the cost of preparing the type of planning proposal required for redevelopment as residential rural lots will be substantial, requiring a range of consultants, experts and planners.

The cost of infrastructure in terms of roads and otherwise in relation to any actual development will also be substantial. Therefore, there is a natural economy of scale and efficiency in ensuring that this work is undertaken across a range of owners and in ensuring that any redevelopment has a consistent rather than fragmented appearance along Highland Way.

10. *Adverse impact by exclusion of relevant portion of Glenrock property*

To exclude that portion of the Glenrock property along Highland Way identified in this submission would result in a completely out of character mishmash of developed and undeveloped land along the exact same section of Highland Way. That will be an unsightly blight on an otherwise pristine rural setting, made worse by the contrast of redeveloped land immediately next to rural land. If there is going to be redevelopment it should occur in a cohesive, disciplined and consistent way in respect of land in the same location, with the same characteristics and topography and with the same appearance from, and frontage to, Highland Way.

We note again that this issue is no longer 'live' given the consensus during our December meeting that as a matter of principle the Glenrock section and the Marulan South precinct (now Marulan East) are either to be included or excluded as one, with no differential treatment disadvantaging the Glenrock portion.

11. *Community benefit must be placed above developer opportunism*

The entity which owns Glenrock has been part of the community for over 35 years. During that time it has invested a sum of over eight figures directly into the community and its businesses through the meticulous restoration of the Glenrock homestead and buildings and the deliberate decision to source all property requirements, including for Glenrock's substantial agribusiness, entirely to local businesses and suppliers. While it and its directors generally prefer a low key approach they are also not averse to becoming personally involved where they consider the benefit of the community requires it, two recent examples being the proposed development along Highland Way which went to the Land and Environment Court and the recent proposal in respect of Tallong Dam which was resolved privately and, again, in to the benefit of the community.

The point is simply this: by including Glenrock within the DUFHS Council will be ensuring that an owner with real ties to the community and involvement in it will be actively engaged in ensuring that any redevelopment will be properly and scrupulously proposed and undertaken in a manner sympathetic to the community and in a quality manner without cutting corners. The likely alternative if Glenrock is omitted is that the size and scale of investment required will see smaller holders sell to developers whose incentive and focus will be only on making a profit. That would be a poor result for the community and one Council can ensure is avoided by including in the DUFHS the relevant section of Glenrock identified in this submission.

We note again that this issue is no longer 'live' given the consensus during our December meeting that as a matter of principle the Glenrock section and the Marulan South precinct (now Marulan East) are either to be included or excluded as one, with no differential treatment disadvantaging the Glenrock portion.

'High' priority and the issue of demand

This is an issue which requires some emphasis: the relevant report indicates, correctly in our view, that future demand is difficult to determine. But, the one thing which we do know (and this is a view accepted not only in this region but in the whole of New South Wales), is that housing demand will increase in the future. The DUFHS is not a DUFHS for 5 years. It is a long-term DUFHS stretching out at least 15 years.

It makes no sense to say on the one hand that the release of 30 residential rural lots (of 2 hectares each as identified above) is 'High' priority and, on the other hand, to say that the land immediately adjoining it on the Glenrock property – which in all respects has the same attributes and characteristics – should be excluded from the DUFHS.

The simple fact of the matter is this: if the 85.5 hectares of land immediately adjoining Glenrock is not only a necessary part of the DUFHS but a High Priority component – as the Elton report states that it is – then the Glenrock land immediately adjoining it identified below must be as well.

We note again that this issue is no longer 'live' given the consensus during our December meeting that as a matter of principle the Glenrock section and the Marulan South precinct (now Marulan East) are either to be included or excluded as one, with no differential treatment disadvantaging the Glenrock portion.

PART B**THE SUBMISSIONS RECEIVED BY DPIE, WATER NSW AND BORAL**

As detailed in the covering letter to this submission, the Business Manager Strategic Planning has based the present recommendation to exclude the Relevant Land squarely on these three submissions. It is therefore necessary to address them in detail.

The following comments are in addition to the specific comments contained above in the covering letter to this submission.

Flawed recommendation

A recommendation is before Councillors to exclude the Relevant Land from the DUFHS.

That recommendation is fatally flawed.

This is because it arises directly – and is stated to arise directly – from Council's Business Manager Strategic Planning's incorrect characterisation of these three submissions. Specifically, the Business Manager Strategic Planning has endorsed the following statement in her review to Councillors for the 21 April ordinary Council meeting:

"Development of this precinct has been questioned by Water NSW, DPIE (Geo Science) and Boral due to water constraints and to potential residential quarrying interface constraints. As a result, no further development is recommended under the Draft DUFHS".

Inaccurate depiction of State Agencies' submissions

That is not an accurate depiction – by any standard – of the actual content of the submissions of the DPIE and Water NSW (I deal with Boral below). The General Manager, and then Councillors, have been given a recommendation which misrepresents these submissions, incorrect information and Councillors are now being asked to make a decision on the basis of that incorrect information. The result of following such a recommendation would be that Councillors would have acted in error against the longer term interests of the community.

Failure to properly assess Boral's submission

As far as the Boral submission is concerned, there has been a complete failure by the relevant Business Manager to objectively assess the statements made by Boral or to weigh them against the merits of inclusion of the Relevant Land as detailed in this and our prior submissions. For the detailed reasons stated in both the covering letter to this submission and below, the Boral submission is a farce. Were Councillors to follow the relevant Business Manager's recommendation to exclude the Relevant Land on the basis of Boral's submission – which is what the Business Manager is suggesting – they would open themselves up to community consternation and condemnation on the basis that Councillors would be preferring the narrow commercial profit interests of a public company over the interests of the community and the potential creation of a vibrant residential corridor of large rural lots along Highland Way. That is not a good position to place Councillors in and we do not understand why it is one which is being advocated by the relevant Business Manager.

Failure to objectively consider our submissions

There has been no comment whatsoever by the relevant Business Manager and no objective consideration of the merits of inclusion of the Relevant Land on the basis of the clear policy and other reasons articulated in our own submissions.

Indeed, the treatment of the Boral submission despite its lack of substance compared with the disregard of our own submissions despite our detailed content creates the impression that the relevant Business Manager is not validly exercising her function but instead simply endorsing the commercial interests of Boral at the expense of the future development of the community.

That is extraordinary given that it was Council's officers who previously included a section of the land along Highland Way for rural residential large lots. At the time Council prepared a draft DUFHS, it is only reasonable to assume that proper due diligence was carried out and comprehensive anecdotal information reviewed for Council's officers to recommend that this land shown on Council's draft plan be identified for rural residential (large lots). It is unreasonable for the Relevant Land not to be included now in circumstances where the DPIE submission supports it, the Water NSW leaves its inclusion completely open and where the Boral submission should be dismissed as self-serving codswallop.

Specific comments regarding the DPIE submission

Contrary to what has been suggested by the Business Manager Strategic Planning the DPIE submission does **not** suggest that the Relevant Land should be excluded. **It specifically states the opposite:** *"the Division has no concerns with the Marulan South area (north of the main Southern Railway)".* As noted in the covering letter to this submission, this is precisely the location of the Relevant Land.

Accordingly, the DPIE submission cannot be relied upon as a basis for the relevant Business Manager's flawed recommendation.

We note that in the relevant Business Manager's report to Council, no reference is made to the DPIE's comment that it has "no concerns" with the inclusion of the Relevant Land (all of which is north of the main Southern Railway) being developed for rural-residential purposes.

The DPIE'S submission in fact supports the inclusion of the Relevant Land in accordance with our client's submission.

Specific comments regarding the Water NSW submission

Water NSW does not raise any substantive issues, given Council has already allowed unsewered large residential lots east of the Hume Highway in close proximity to Highland Way. These developments include the Tallong rural residential development less than five minutes' drive from the Glenrock property, and rural residential lots along Highland Way and Long Point Road. Rural residential housing developments have also been approved such as Glenrowan Green – all without town water. In any event, the matters raised in Water NSW's submission are insubstantial and would need to be dealt with as part of the supporting documentation for a future Planning Proposal.

The Water NSW submission makes a number of banal statements relating to the future release of land for large lots (rural residential) which would be unsewered. However, the submission clearly states that: *"Water NSW would welcome the opportunity to discuss with Council whether this area might be more suitable in providing a limited supply of Large Lot Residential housing".*

This quote relates to the Marulan area which includes Marulan South, the subject of this submission. It is evident from the comments of Water NSW that any planning proposal would need to comprehensively address any impacts the proposed development would have on the Sydney Drinking Water Catchment and this requirement would be mandatory.

It follows that, as indicated in the covering letter to this submission, the submission from Water NSW appropriately leaves the potential for redevelopment of the Relevant Land completely open, to be determined by reference to the specifics of any future planning proposal. That is entirely appropriate and does not form any valid or legitimate basis for prematurely excluding the Relevant Land from the DUFHS at this time.

Further, even in the context of Water NSW's general submission it has expressly recognised the suitability of the Marulan area which includes the Relevant Land for future supply of large lot residential housing as demonstrated by the above quote from the submission. It follows that there is no legitimate or reasonable basis to suggest that this submission forms a valid basis for excluding the Relevant Land from the DUFHS: the opposite is in fact the case.

Once again, the relevant Business Manager has taken a substantial amount of licence to translate into her recommendation a conclusion which is neither contained in, nor supported by, the Water NSW submission.

Specific comments regarding the Boral submission

A review of the Boral submission has now been undertaken in an attempt to gain a better understanding of why Boral opposes the inclusion of the land along Highland Way.

It is surprising that Boral would object to additional housing capacity in a community of which it states it wants to be an active and productive member. It is also surprising to note that the content of the submission does not provide any detail, any evidence or even any argument as to how the inclusion of the Relevant Land actually impacts Boral. Specifically:

1. The submission does not address impact on Boral at all. It only references a suggestion of impact in the vaguest terms and without any specificity whatsoever. This is styled around the amorphous suggestion of some unspecified concern over "future residential interference" to the small side rail line for the quarry.

Yet as that line is not only completely outside and separated from the Relevant Land, it rests entirely within the Glenrock property and access to it is in fact controlled through Glenrock itself, as demonstrated by the depiction in Appendix 1. The private rail line is not is it accessible from the Relevant Land at all.

To the extent this matter could be even argued to be a concern, which is not articulated at all by Boral, such concern would easily be able to be addressed – and would in fact be required to be addressed – in a future planning proposal. This would be as simple as a secure physical separation mechanism e.g. secure fencing and access of the type already extant on most rural properties.

Last, if this vague suggestion were to be treated as a valid concern then, applying consistent criteria, there could be no rail line anywhere proximate to any residential area in New South Wales – including the main rail line which has been there for well over 100 years.

The argument, or rather the vague suggestion, is a nonsense which would be destroyed within 5 minutes of it being properly interrogated.

Appendix 1 shows the Boral private rail line in red. In addition to its physical separation and inaccessibility Appendix 1 shows that this line terminates at the Main Southern Rail Line and does not encroach upon any of the Relevant Land.

2. Boral's submission is not able to establish any interaction or interrelation between its property and the Relevant Land. That is because there is none.

There is a buffer of some 2,500 acres – from Glenrock alone – between the two, a distance between Boral's property and the Relevant Land of many kilometres and no direct or indirect sightline whatsoever.

In those circumstances, Boral's submission has no relevance or credibility because the suggestion that Boral's property or operations would in any way be affected by the small number of residential lots proposed is, again, a nonsense.

The Glenrock property, which operates as a primary agricultural business, has worked in harmony with the Boral operations for many years. The introduction of a specified area of land along Highland Way for rural residential (large lots) does not, in any manner, represent a threat to the continued agricultural pursuits of Glenrock or the operations of Boral. As such it is farcical for Boral to suggest that the proposed rural residential (large lots) development along Highland Way would result in "lack of site suitability due to inherent constraints and incompatibility of residential development with surrounding and established primary production uses". If any party were capable of validly making such a claim it would be our client but our client rightly regards the claim as absurd, as must Council based on the previous reporting and recommendations. This comment is a patent attempt by Boral to make submissions in respect of land it does not own and which has no connection with and no effect on its operations. Rather than given weight it should be dismissed for the self-serving interference it is.

3. All loads from Boral's mining operations to the Main Southern Rail Line are required to be covered as a matter of occupational health and safety, pollution and dust avoidance and basic good practice. Boral, at its credit, is scrupulous in ensuring this occurs. This, combined with the physical separation between the private rail line and the Relevant Land detailed above, makes the prospect of any interference or tampering with Boral's product non-existent. This matter has not even been raised by Boral; we simply raise it for completeness to illustrate even further the lack of validity to the Boral submission.
4. Boral's submission lists a number of criteria which it says have not been addressed. It goes on to suggest that the failure to now address those matters is in effect fatal to the proposal to include the Relevant Land.

That, again, is a nonsense: *none of those criteria have been addressed for the other precincts proposed to be included in the DUFHS either. This is for the very simple and valid reason that every one of them would be required by Council to be addressed in the required planning proposal before any proposal for redevelopment could be advanced.*

This aspect of Boral's submission shows either, or both, a complete ignorance of the planning proposal and required consent process or an attempt to grasp at straws to bolster a submission which is indefensibly tenuous. It is a smokescreen.

5. The Boral submission is nothing more than the usual mining strategy of overreach and isolation; designed to ensure that public and community policy is manipulated to achieve the greatest possible buffer zone for a mine's operations.

The plain fact is that the inclusion of the Relevant Land in the DUFHS has zero effect on Boral or its operations. This includes the small branch private rail line which is entirely separate from the Relevant Land and in fact isolated within the Glenrock property itself, which forms a buffer zone of some 2,500 acres between Boral's operations and the Relevant Land.

Boral wishes to be seen as an active and community-minded citizen. But attempting – without consulting its neighbours who actually own the Relevant Land – to stretch its corporate arm across a 2,500 acre divide to interfere with the inclusion in the DUFHS of that land when it has no operational effect on Boral whatsoever is not the way to achieve that goal.

It is nothing more than an attempt to ensure there are less members of the community that Boral must engage with in the future – hardly community-minded.

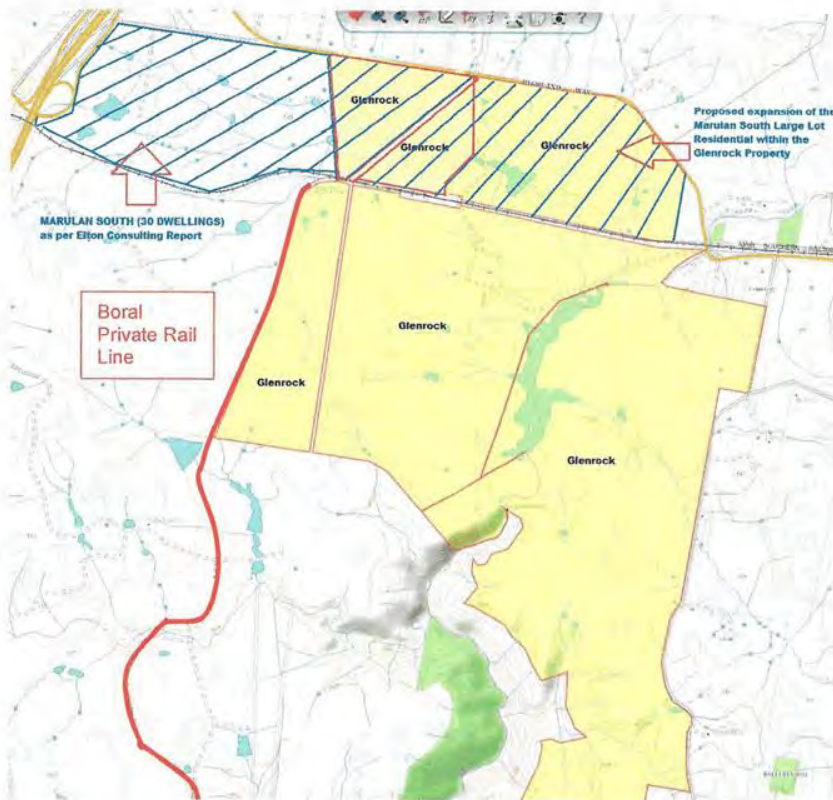
We note our client has advised Boral in writing of the above. That was done as a professional courtesy so Boral is aware of the comments being submitted to Council. To date, no such reciprocal courtesy has been extended by Boral to our client, who was not aware of the Boral submission until very recently. That is disappointing considering Glenrock is Boral's largest neighbour and that the basic courtesy of discussing a submission made regarding a neighbour's land is one encouraged by Councils across New South Wales.

Last, we reiterate our concern that the relevant Business Manager has placed such weight on the Boral submission, and has mischaracterised the Public Agency submissions, while at the same time having ignored the entire substance of our submissions.

Council is not the mouthpiece of Boral and Boral's expectation that it can object on the spurious and fatuous bases it has and then be treated seriously by Council should be shut down without it being further entertained.

APPENDIX 1: THE RELEVANT LAND

As defined in this submission, the Relevant Land is comprised by reference to the illustration below of all of the hatched land, being: (i) the hatched land identified as "Marulan South" and (ii) the hatched land identified as "Glenrock".



13 May 2020

The Councillors
Goulburn Mulwaree Council
85 Deccan Street
Goulburn NSW 2580

By email

Dear Councillors

SUGMISSION: DRAFT URBAN FRINGE HOUSING STRATEGY (Strategy)

SHPA Inc, formerly MRAG Inc

We are writing on behalf of the Southern Highlands Progress Association Incorporated (formerly the Marulan Residents Action Group Incorporated) (**Association**).

Purpose of letter

The purpose of this letter is to express the Association's concern regarding the exclusion of certain land from the Strategy.

In making this submission we have had regard to the submission of Tomasy Planning to Council dated 12 May 2020 on behalf of the owner of Glenrock (**Tomasy submission**).

The Relevant Land and specific concerns

Specifically our concern relates to the exclusion from the Strategy of the land along Highland Way, identified in the Tomasy submission as the Relevant Land and shown in Appendix 1 of the Tomasy submission (**Relevant Land**).

The Relevant Land immediately adjoins and runs along the one continuous stretch of Highland Way. Highland Way forms the start of the Southern Highlands Scenic Tourist Drive and acts as the gateway through and along which Tallong, Wingello and other towns are placed.

Highland Way also already forms a residential area and corridor. Its inclusion within the Strategy as a site for future large lot residential housing supply would benefit not only the immediate sense of continuity, development and cohesion within the community, it would also provide further much needed residential presence which in turn would provide greatly needed support to the individual towns of Marulan, Tallong and Wingello.

We otherwise incorporate by reference each of the concerns and submissions in the Tomasy submission, including the commentary on the public agency and Boral submissions.

In that respect, we are very concerned by the present recommendation to Councillors that the Relevant Land be excluded from the Strategy on the basis of 3 submissions received by the Department of Planning (DPIE), Water NSW and Boral – particularly when those submissions do not legitimately support the exclusion of the Relevant Land as detailed in the Tomasy submission.

Public agency submissions

The Association does not understand how the actual content of the DPIE and Water NSW submissions has been inaccurately depicted to Councillors as outlined in detail in the Tomasy submission. What is clear, however, is that those submissions do not support the present recommendation to exclude the Relevant Land: they do the opposite (again as detailed in the Tomasy submission).

Boral submission

The Association has read both the Boral submission and the commentary of the Tomasy submission on it. We agree entirely with that commentary.

It would be of the utmost concern if Council adopted a recommendation which supports a private for profit enterprise at the expense of the community.

Community benefit

There is a clear community benefit by inclusion of the Relevant Land within the Strategy and as outlined in detail in the Tomasy submission.

Further, there is no detriment to the community from Council including the Relevant Land within the Strategy. In any event, whether or not such land would ultimately be able to be redeveloped will depend on the merits of any relevant future planning proposal at that time and as detailed in the Tomasy submission.

Progression

We ask that Councillors reject the current recommendation to exclude the Relevant Land and that Councillors instead specifically include the Relevant Land within the Strategy.

We are happy to discuss any aspect of the above in further detail as Council wishes.

Sincerely

Ross Cameron
Co-chairman

Charles Mendel
Co-chairman

Southern Highlands Progress Association

Southern Highlands Progress Association, Inc (previously Marulan Residents Action Group, Inc) is an incorporated association in New South Wales. It is a not-for-profit entity dedicated solely to the best interests of the Southern Highlands community and devoid of racial, religious or sexual affiliation or bias.

B-5 Council Report Closing Consultation 16 June 2016

15 REPORTS TO COUNCIL FOR DETERMINATION**15.1 DRAFT URBAN AND FRINGE HOUSING STRATEGY - CLOSING CONSULTATION****Author:** Kate Wooll, Business Manager Strategic Planning**Authoriser:** Warwick Bennett, General Manager

Attachments: 1. **Submission Summary - Final Consultation with Submitters (separately enclosed)** 

2. **Submissions (separately enclosed)** 

Link to Community Strategic Plan:	<p>Strategy EN4 – Maintain a balance between growth, development and environmental protection through sensible planning.</p> <p>Strategy CO4 – Recognise and celebrate our diverse cultural identities, and protect and maintain our community's natural and built cultural environment.</p> <p>Strategy CL – Encourage and facilitate open and respectful communication between community, the private sector, Council and other government agencies.</p>
Cost to Council:	Exhibition costs only are relevant at this stage – advertising and staff time
Use of Reserve Funds:	Nil

RECOMMENDATION

That

- The report from the Business Manager Strategic Planning regarding the closing consultation for the *Draft Urban and Fringe Housing Strategy* be received.
- The *Draft Urban and Fringe Housing Strategy* be presented to Council for adoption subject to the following amendments:
 - The Precinct Map – Opportunities and for Marulan North to be amended to identify the haulage route as having a 250m buffer from development between Brayton Road, Ambrose Road and Red Hills Road through to the Hume Highway.
 - The Consultation Report be amended to include commentary/to address the submission from Boral (dated 16 December 2019) and to expand upon the assessment of the Boral submission dated 18 December 2019.
- Council decline the request for the extension of either the urban residential or rural residential opportunity areas identified within the *Draft Urban and Fringe Housing Strategy* to 515 Crookwell Road, Kingsdale. This decision is based on the lack of established demand for such an extension because of the surplus of land already identified in the Strategy and due to the site having water quality constraints beyond those identified in the other opportunity areas.
- Council decline at this time the extension of either the urban residential or rural residential opportunity areas identified within the *Draft Urban and Fringe Housing Strategy* to the area located on the eastern side of the Hume Highway, south of Old Tallong Road and Highland Way through to Barber's Creek Road (north of the railway line). This conclusion is based on the need to establish demand for such an extension given the surplus lots identified in the of either the urban residential or rural residential opportunity areas identified within the *Draft Urban and Fringe Housing Strategy* for Marulan and potential water quality impacts. This area to be reconsidered by Council as part of the *Rural Lands Strategy*.

Section 375A of the Local Government Act 1993 requires General Managers to record which Councillors vote for and against each planning decision of the Council, and to make this information publicly available.

BACKGROUND

Council at its meeting of 21 April 2020 considered a post exhibition report on the *Draft Urban and Fringe Housing Strategy* (the Strategy). Council resolved at that meeting that:

1. *The report from the Business Manager Strategic Planning regarding the revised Draft Urban and Fringe Housing Strategy be received.*
2. *Council defer the revised Draft Urban and Fringe Housing Strategy for a period of three months for further consultation with submitters and a Council Briefing for a full Saturday.*

This report follows the closing consultation with submitters (from the second exhibition) and the subsequent Councillor Briefing session held on Saturday 16 May 2020.

REPORT

Closing Consultation

In accordance with discussion and direction on this matter (Council Meeting held 21 April 2020), closing consultation was offered to those who had made submissions on the second exhibition of the Strategy. Each submitter was advised in writing of the Council Resolution of 21 August 2020, with submitters from the second exhibition provided three (3) weeks to submit any additional supporting information. The intention of this timeframe was to allow for submissions to be received prior to the Councillor Briefing session which was scheduled and held on 16 May 2020.

Submission Summary

A total of eight (8) closing submissions were made following the 21 April 2020 resolution. A submission summary and commentary is provided in **Attachment 1** and a full copy of all submissions is provided in **Attachment 2**.

Demand and Supply of Housing

The Strategy is intended to identify housing demand and supply until 2036 but actually extends beyond that timeframe identifying further land that may be suitable for urban expansion post 2036 (or earlier if demand is beyond the forecast levels).

The areas identified for supply opportunities in both Goulburn and Marulan are already substantially in excess of the amounts identified to meet housing supply until 2036 as per the following:

	Forecast Demand for lots (Detached Dwellings) to 2036	Current supply provided in Strategy to 2036	Supply in Strategy beyond 2036	Difference between demand and supply to 2036
Goulburn Urban/serviced	2,435	3,824	3,490	+1,389
Goulburn Rural residential (2ha+ unserviced)	360	352	0	- 8
Marulan Urban/serviced	355	694	631	+339

It should be noted that given the potential constraints on some sites, it is highly likely that some lots identified for urban will be required to be larger upon completion of the relevant Planning Proposals, i.e. rural residential lots. It is therefore considered beneficial to slightly over-cater, but it must be recognised that excessive supply could result in outcomes detrimental to future release opportunities.

For example, if an area of 250m is identified as a buffer area along the Brayton Road– Ambrose Road- Red Hills Road haulage route as discussed below, or as the need to avoid development in proximity to water courses, biodiversity etc. arises, the outcome will be a reduced number of serviced urban lots. The final totals can only be provided by carrying out the specific studies and master planning exercises associated with specific Planning Proposals, however this will be offset by the potential for additional large lot opportunities.

The identified need in the Strategy in total for dwellings to 2036 was **3500** which also included up to 100 additional lots generally within the local government area (outside Goulburn and Marulan) and 250 infill lots/dwellings within Goulburn. The total number of potential lots now identified is **5,220** including the infill and broader LGA component.

This increase in identified supply to 2036 coupled with area of supply identified post 2036 is considered to exceed the estimated demand. The approach in identifying post 2036 demand is intended to provide clarity for future planning. In effect the intention is to protect land with long term urban extension potential from unsuitable development, but also to provide flexibility should demand be stronger than that identified to date.

It is significant to consider this when assessing requests for further extensions to the Strategy, as such requests would not be able to be justified based on housing demand.

Assessment

Following the Councillor Briefing Session and closing consultation the following areas were highlighted for further discussion:

- Extension of Strategy Area to Include 515 Crookwell Road, Kingsdale

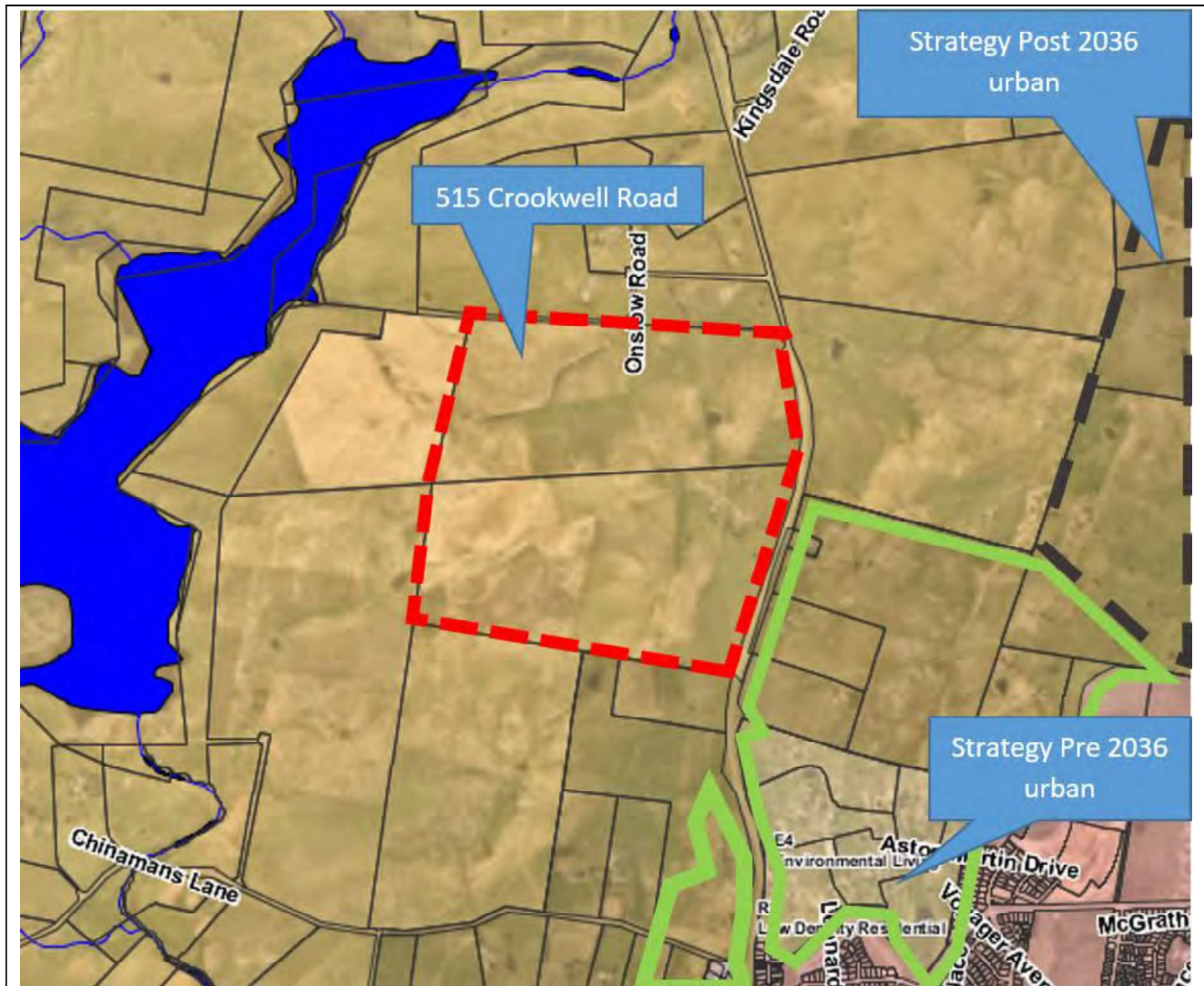


Figure 1 - Strategy Opportunity Areas (Pre 2036 and Post 2036 Urban) and 515 Crookwell Road, Kingsdale

The extension of the Strategy opportunity area for residential development extending to 515 Crookwell Road, Kingsdale cannot be justified on the basis of housing demand and supply. Given that this is the fundamental concept for the Strategy, the only other way this could be viewed would be on the basis that this area poses less constraints to other areas identified in the Strategy for residential.

If the criteria of the Strategy is applied, this area has been excluded for the following reasons:

- 515 Crookwell Road is zoned E3 Environmental Management. Generally any E-zone has been avoided in favour of the RU6 Transition Zone.

The key reason for this can be found within the Goulburn Mulwaree LEP 2009 under the objectives of the E3 zone, which are:

- To protect, manage and restore areas with special ecological, scientific, cultural or aesthetic values.

- To provide for a limited range of development that does not have an adverse effect on those values.
- To facilitate the management of water catchment areas, environmentally sensitive land and areas of high conservation value.

This rationale is also backed up by Clause 2.1(5) of the Local Planning Directions issued by the NSW Minister for Planning in 2016, which clearly states that the rezoning of E-zoned land would need to demonstrate that any current environmental protection standards would not be reduced.

- The site is not contiguous with existing residential zones or development.
- The site adjoins Sooley Dam and contains water courses feeding into Sooley Dam. No other identified sites within the Strategy pose an immediate risk to water quality in comparison with this site.
- The site is identified as being located partly over Class 3 Agricultural Land (which is the highest class), which has so far been avoided by the Strategy.

In relation to water quality, Council's Director Utilities was referred the submitted *Preliminary onsite Wastewater and Stormwater Management Constraints Assessment: 515 Crookwell Road, Kingsdale* prepared by Martens Consulting Engineering, and has advised:

Council has a requirement under the NSW Public Health Act 2010 to have a Drinking Water Management System to ensure the supply of high quality and safe drinking water to our customers. This system needs to meet the requirements of the twelve elements of the Australian Drinking Water Guidelines 2011 Framework for the Management of Drinking Water Quality. This includes the requirement that Council has a multi-barrier approach to water system management. This requires management from the catchment to the tap. Catchment management is vital to protect our raw water quality due to the impacts that arise from treatment due to nutrients, pathogens, chemicals, heavy metals and pesticides that may arise through land-use in the catchment. Treatment cannot treat all impacts to water quality.

This report [Martins Consulting Engineers Report dated May 2020] is assessing the potential for 225 houses in very close proximity to Goulburn's primary water storage, Sooley Dam. The site boundary appears to be located directly 900 metres from the storage. Development located this close to the dam is not appropriate due to the impacts from onsite wastewater management systems, stormwater/roads systems, animal droppings, lawn clippings, erosion and other chemical use near the Sooley Dam.

This risk is further increased through the density of this particular development. Some water authorities have restricted development in their catchments to manage water quality impacts to their storages from development and even access to the dam. Water NSW has restricted all access within their catchments for the Sydney system. Their catchments are dedicated as special areas where access is not permitted and is legally enforced.

Melbourne Water have a similar approach and Hunter Water have Chichester Dam located in the Barrington Tops National Parks that provides protection of their dam from development. These organisations have legally protected their catchments to protect water quality for their customers. They do not allow access and have eliminated the potential for development to ensure protection to raw water quality. We do not have the systems in place to be able to do this however we need to protect water quality as far as practicable to minimise impacts on raw water quality.

Points directly from the report that do not support development in this area:

- *The site is generally slightly undulating with slopes up to around 20%. This is clearly shown on Map 02*
- *Part of the site drains directly to Sooley Dam, other sections drain away from the dam into water courses that drain into the dam. The drainage lines are shown in Map 04.*
- *Map 07 – shows the areas of the land that have been assessed as constrained and partly constrained. Visually this appears to cover just under half of the site. This is not considered satisfactory in very close proximity to a drinking water storage for town supply.*

This report is the completion of a preliminary onsite wastewater and stormwater assessment for the site to support a submission to the Urban Housing Strategy. This section is not urban area and it is understood that other more suitable land has been found that will not impact on Sooley Dam. Sooley dam is part of the primary water source for Goulburn. This supply is essential for Goulburn and the quality needs to be protected as far as practicable. A development of this density is not supported from our perspective particularly when it includes onsite wastewater treatment within close proximity to Goulburn primary water supply.

The report concludes that there is no significant constraints to onsite wastewater management however the points stated above do not support this conclusion in relation to slope, drainage to the dam and the areas marked as constrained and partly constrained. It is understood that wastewater management systems are a significant risk to a water supply over the life of the development. This along with the other impacts from development listed above.

Given the reliance on this dam for Goulburn, the availability of suitable land that will not impact on the water quality of Sooley Dam, we cannot support this report and the consideration of high density housing alongside Sooley Dam within this proximity of Sooley Dam.

A suggestion made at the Councillor Briefing session was consideration of a rural residential strip located between the identified opportunity areas in the Strategy to follow Crookwell Road to Onslow Road. Upon further consideration, given the location of water courses and the need for on-site waste disposal to be excluded from 100m of a watercourse, unsewered rural residential would be limited. Opportunities for beautification of this approach to Goulburn, however, may include a tree planting program along Crookwell Road between Onslow Road and Marys Mount.

In summary, extension of either the urban residential or rural residential opportunity areas within the Strategy to 515 Crookwell Road, Kingsdale is not recommended. This is based on the lack of established demand for such an extension (considering the surplus of land identified already in the Strategy and due to the site having water quality constraints beyond those identified in the other opportunity areas. Furthermore, the site is not contiguous to existing development and development would be contrary to the criteria used to identify suitable sites.

- Haulage Route – Brayton Road – Ambrose Road - Red Hills Road

The Strategy does identify the haulage route for Gunlake as a constraint in the Marulan North Precinct. A specific buffer distance was not specified in the Strategy due to the need to do a noise assessment and traffic assessment as a part of future planning. Similar to other precincts the opportunity area as mapped deliberately did not follow strict property boundaries, in the expectation of future constraints and site specific studies being used to determine boundaries.

As it currently identified, the buffer as mapped covers a distance of approximately 260m south of Ambrose – Red Hills Road. The opportunity area is indicated as being to the south of this distance.

The precinct map could be amended to include the 250m buffer in the legend (similar to the Hume Highway). It is noted, however, that this is only a strategy document and that further detail around

this issue will need to be dealt with at the Planning Proposal/DCP/Master Planning and later development application phases.

It is recommended that the legend in the precinct map be amended to include the 250m distance in the buffer (similar to Hume Highway) for Ambrose/Red Hills Road from Brayton Road to the Hume Highway.

Extension of Marulan to East

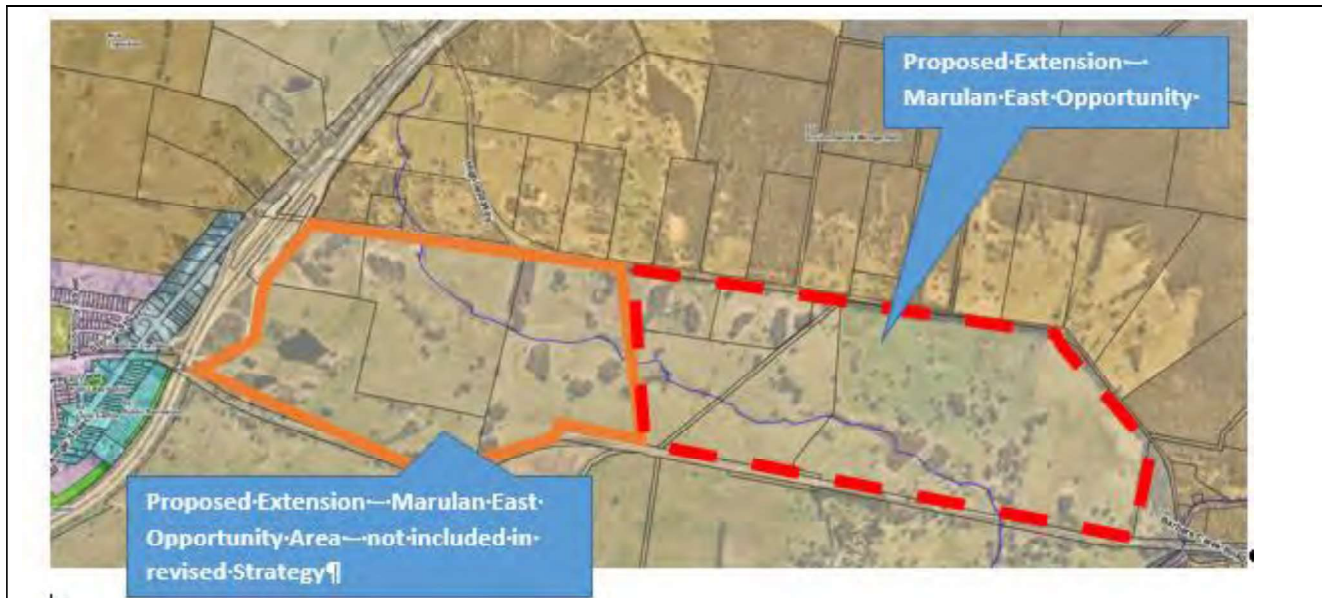


Figure 2 - Strategy Opportunity Area (Pre 2036 Rural Residential – 2nd Exhibition) and 245 Highland Way - North of the Railway Line.

The extension of the Strategy opportunity area for rural residential cannot be justified on the basis of housing demand and supply. An initial excess of 339 residential lots have already been identified in Marulan alone. The Tomasy Planning submission suggests the extension of the exhibited Marulan East (formerly known as Marulan South Precinct) through to Barbers Creek Road. This would cover an area in total of approximately 300ha of land to be proposed for large lot rural residential, with potential for lots down to 2ha. This, at a rate of 70% development (i.e. excluding roads etc) would equate to approximately 105 additional lots when the total identified need for Marulan was only 350 residential lots (which is already exceeded in the Marulan North Precinct). However, the number of lots realistically capable of development may be greatly reduced if the required 100m buffers are imposed for effluent management areas.

The Tomasy Planning submission found that the identified area was not flood prone based on Council's LEP mapping, however, the only adopted flood study for the LGA is for Goulburn. In other words, Marulan has never been subjected to a flood study. As can be seen on the map below, the identified precinct contains a number of water courses and flood potential has yet to be determined for this locality. This is however, a matter that could be considered at a later date as with other precincts.

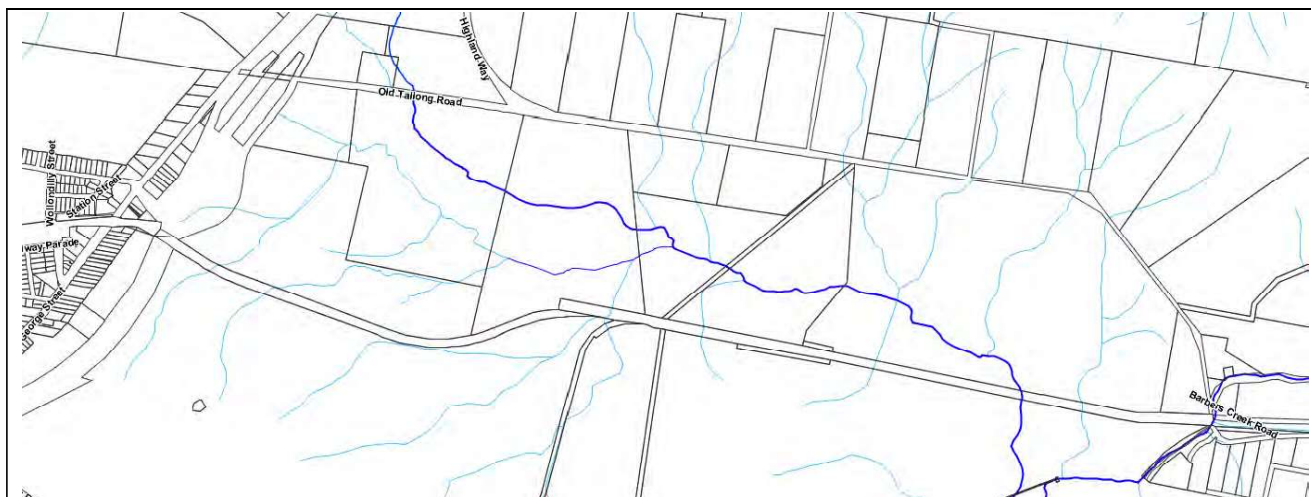


Figure 3 - Creeks and Water Courses

The presence and extent of water courses does however pose an issue in relation to water quality and suitability for 2ha lots, as on-site effluent management systems must have a 100m buffer to water courses within the Sydney Drinking Water Catchment. In this respect, Water NSW has advised:

The Strategy also proposes to accommodate Large Lot Residential (unsewered) development in an area referred to as Marulan South (Figure D). It appears this area is being put forward in place of former Deferred Area 16 which lies south of the railway line. Both former Deferred Area 16 and the current Marulan South Opportunity Area have significant water quality risk constraints. Based on the results of the SLWCA for Residential Unsewered Lots (4,000m² to 2ha), both areas are characterised by Moderate to Extreme Risks to water quality, with most of the land being dominated by an Extreme risk. The Marulan South area contains a number of 1st and 2nd order drainage features and, as raised earlier, the constraints analysis, does not take into account the buffer distances for EMAs. The land may be more constrained than anticipated by the Strategy. WaterNSW is generally not supportive of unsewered development occurring in this area.



Figure 4 - Strategic Land and Water Capability Assessment - Map Extract – Unsewered Residential to 2ha

In summary, identification of a rural residential opportunity area along the southern side of Old Tallong Road and Highland Way is not recommended. This is based on the lack of established demand for such an extension, considering the surplus of land already identified in the Strategy and due to the site having water quality constraints.

Correction

It has been brought to Council's attention via the most recent submission from Tomasy Planning that the Department of Planning, Industry and Environment (Geoscience) comments in relation to the rural residential proposal in Marulan East (formerly known as Marulan South precinct) was incorrectly interpreted.

In the Submission Summary for the Strategy presented at the Council Meeting of 21 April, 2020 the following was stated in relation to the submission from Department of Planning, Industry and Environment (Geoscience):

Generally the agencies were supportive of the revised Strategy and found it to be a significant improvement on the first Draft. No major issues of concern were identified, although some specific comments were offered for consideration. The most significant change to the document (following State Agency feedback) is the exclusion of the Marulan South Precinct (now referred to as Marulan East) as a rural residential opportunity area following significant concerns raised by Water NSW and Department of Planning, Industry and Environment (Geoscience). This precinct had moderate to generally extreme risk for water quality if developed for rural residential and had potential interface issues with extractive industries and associated rail.

The summary table of State Agency submissions also stated:

State Agencies	
NSW Department of Planning and Environment (Geoscience)	Supportive of Goulburn releases but is concerned with South Marulan Precinct M2 which is in close proximity to the private rail line to Peppertree Quarry (thereby resulting in future interface issues with extractives). Wants constraints map to include "buffer" on Ambrose Rd (Gunlake Quarry haul route).

The *Consultation Report* from Elton Consulting as presented to Council summarised the Department of Planning and Environment (Geoscience) submission correctly:

The Division has no concerns with the Marulan South area (north of the main Southern Railway), however further residential development within area M-2 south of the Main Southern Railway in the vicinity of the Peppertree Quarry private rail line (Consolidated Mining Lease16) would be of concern to the Division. P.66

The above is an accurate reflection of the submission and does not require correction.

The Elton Consulting *Consultation Report* goes on to state in Section 1.8 Clarification:

Marulan South

The Large Lot Residential opportunity area identified in the revised Draft Strategy has resulted in submissions from Water NSW, DPIE Geoscience and Boral. Water NSW is concerned at the potential risk to water quality which is rated as generally extreme in this location for unsewered residential development in Water NSW' Strategic land and Water Capability Assessment. DPIE Geoscience and Boral both raised concern regarding future residential interface with the railway side line to the quarry. The main issue, is however, the risk to water quality for unsewered residential development, as identified by Water NSW, which is the basis for excluding the area for inclusion as a Large Lot Residential Opportunity area in the Strategy.

The Elton Consulting *Consultation Report* and Council Report, does omit a second Boral submission which relates to the proposed rezoning of the Truck Stop site at Marulan. This submission is included in Attachment 3 to the post exhibition report on the Strategy presented to Council on 21 April 2020 (full version provided) but followed a separate submission from Boral relating to the Marulan South Area. It is recommended that the Consultation Report be amended to include commentary/address both submissions.

Conclusion

In conclusion, the Draft Strategy is a housing strategy and is concerned primarily with the demand and supply of housing. The Strategy has a long term application as it identifies both land required to meet the needs of residential growth up until 2036 (with surplus), but also identifies likely areas for growth beyond 2036. Therefore the number of years' supply of the land in the Strategy is very generous and will ensure that future planning for residential has an appropriate guiding framework well into the future. No further extensions to urban residential or rural residential areas are recommended.

B-6 Council Minutes Closing Consultation 16 June 2020



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16 June 2020

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**MINUTES OF GOULBURN MULWAREE COUNCIL
ORDINARY COUNCIL MEETING
HELD AT THE COUNCIL CHAMBERS, CIVIC CENTRE, 184 - 194 BOURKE STREET,
GOULBURN
ON TUESDAY, 16 JUNE 2020 AT 6PM**

PRESENT: Cr Bob Kirk (Mayor), Cr Peter Walker (Deputy Mayor), Cr Andrew Banfield, Cr Leah Ferrara, Cr Alfie Walker, Cr Margaret O'Neill & Cr Carol James.

IN ATTENDANCE: Warwick Bennett (General Manager), Brendan Hollands (Director Corporate and Community Services), Marina Hollands (Director Utilities), Scott Martin (Director Planning & Environment, Matt O'Rourke (Director Operations) & Amy Croker (Executive Officer).

1 OPENING MEETING

Mayor Bob Kirk opened the meeting 6pm. The Mayor advised that the meeting would be webcast live.

2 ACKNOWLEDGEMENT OF COUNTRY

Mayor Bob Kirk made the following acknowledgement.

"I would like to Acknowledge and pay our respects to the Aboriginal elders both past and present as well as emerging leaders, and Acknowledge the traditional custodians of the Land on which we meet today."

3 COUNCILLORS DECLARATION AND/OR PRAYER

The opening prayer or declaration was read by Cr Alfie Walker.

4 APOLOGIES

RESOLUTION 2020/217

Moved: Cr Alfie Walker

Seconded: Cr Margaret O'Neill

That apologies from Cr Sam Rowland and Cr Denzil Sturgiss be received and leave of absence granted.

CARRIED

5 APPLICATIONS FOR A LEAVE OF ABSENCE BY COUNCILLORS

RESOLUTION 2020/218

Moved: Cr Carol James

Seconded: Cr Leah Ferrara

That:

1. The application from Cr Denzil Sturgiss and leave of absence granted due to health reasons.
2. The application from Cr Sam Rowland and leave of absence granted due to work commitments outside of the region.

CARRIED

6 LATE ITEMS / URGENT BUSINESS

It was noted that Boral made an additional submission to 15.1 Draft Urban and Fringe Housing Strategy - Closing Consultation and that was tabled for Councillors information.

7 DISCLOSURE OF INTERESTS

Deputy Mayor Peter Walker declared a non-pecuniary/non-significant conflict of interest in Item 15.5 "Request for Financial Assistance - Rotary Club of Goulburn" as he is a member of this club. As the disclosure was not of a significant nature Deputy Mayor Peter Walker remained in the meeting while discussion took place.

Cr Carol James declared a non-pecuniary/non-significant conflict of interest in Item 15.5 "Request for Financial Assistance - Rotary Club of Goulburn" as she is a member of this club. As the disclosure was not of a significant nature Cr Carol James remained in the meeting while discussion took place.

Cr Banfield made a statement in relation to the Business Paper. He has assessed the Business Paper and does not perceive any declaration of interest is required to be declared in relation to his employment with Denrith Group of Companies.

8 PRESENTATIONS

Nil

9 PUBLIC FORUM

Rachael Snape of Boral's address to Council on Item 15.1 Draft Urban and Fringe Housing Strategy - Closing Consultation was tabled at the meeting to Councillors.

Jeff Bulfin representing the owners of 515 Crookwell Road Kingsdale addressed Council on Item 15.1 Draft Urban and Fringe Housing Strategy - Closing Consultation.

RESOLUTION 2020/219

Moved: Cr Peter Walker

Seconded: Cr Margaret O'Neill

That an extension of time be given to Jeff Bulfin for one minute as part of the Public Forum.

CARRIED

10 CONFIRMATION OF MINUTES

10.1 MINUTES OF THE ORDINARY MEETING OF COUNCIL HELD ON 2 JUNE 2020

RESOLUTION 2020/220

Moved: Cr Carol James

Seconded: Cr Leah Ferrara

That the Council minutes from Tuesday 2 June 2020 and contained in Minutes Pages No 1 to 24 inclusive and in Minute Nos 2020/195 to 2020/216 inclusive be confirmed.

CARRIED

11 MATTERS ARISING

11.1 MATTERS ARISING FROM COUNCIL MEETING MINUTES FROM THE 2 JUNE 2020

Nil

11.2 OUTSTANDING TASK LIST FROM ALL PREVIOUS MEETINGS

RESOLUTION 2020/221

Moved: Cr Alfie Walker

Seconded: Cr Andrew Banfield

That Council notes the Task List and authorises the deletion of completed tasks.

CARRIED

12 MAYORAL MINUTE(S)

Nil

13 NOTICE OF MOTION(S)

Nil

14 NOTICE OF RESCISSION(S)

Nil

15 REPORTS TO COUNCIL FOR DETERMINATION

15.1 DRAFT URBAN AND FRINGE HOUSING STRATEGY - CLOSING CONSULTATION**RESOLUTION 2020/222****Moved: Cr Peter Walker****Seconded: Cr Margaret O'Neill****That Council Move into Committee of the Whole.**

Council moved into Committee of the whole at 6:27pm.

CARRIED

At 7:18 pm, Cr Peter Walker left the meeting. At 7:20 pm, Cr Peter Walker returned to the meeting.

RESOLUTION 2020/223**Moved: Cr Andrew Banfield****Seconded: Cr Alfie Walker****That Council move back into Open Council.**

Council moved back into Open Council at 7:21pm.

CARRIED**MOTION****Moved: Cr Andrew Banfield****Seconded: Cr Leah Ferrara****That**

1. The report from the Business Manager Strategic Planning regarding the closing consultation for the *Draft Urban and Fringe Housing Strategy* be received.
2. The *Draft Urban and Fringe Housing Strategy* be presented to Council for adoption subject to the following amendments:
 - a) The Precinct Map – Opportunities and for Marulan North to be amended to identify the haulage route as having a 250m buffer from development between Brayton Road, Ambrose Road and Red Hills Road through to the Hume Highway.
 - b) The Consultation Report be amended to include commentary/to address the submission from Boral (dated 16 December 2019) and to expand upon the assessment of the Boral submission dated 18 December 2019.
3. Council decline the request for the extension of either the urban residential or rural residential opportunity areas identified within the *Draft Urban and Fringe Housing Strategy* to 515 Crookwell Road, Kingsdale. This decision is based on the lack of established demand for such an extension because of the surplus of land already identified in the Strategy and due to the site having water quality constraints beyond those identified in the other opportunity areas.
4. Council decline at this time the extension of either the urban residential or rural residential opportunity areas identified within the *Draft Urban and Fringe Housing Strategy* to the area located on the eastern side of the Hume Highway, south of Old Tallong Road and Highland Way through to Barber's Creek Road (north of the railway line). This conclusion is based on the need to establish demand for such an extension given the surplus lots identified in the of either the urban residential or rural residential opportunity areas identified within the *Draft Urban and Fringe Housing Strategy* for Marulan and potential water quality impacts. This area to be reconsidered by Council as part of the *Rural Lands Strategy*.

AMENDMENT & RESOLUTION 2020/224

Moved: Cr Margaret O'Neill

Seconded: Cr Bob Kirk

That

- 1. The report from the Business Manager Strategic Planning regarding the closing consultation for the *Draft Urban and Fringe Housing Strategy* be received.**
- 2. The *Draft Urban and Fringe Housing Strategy* be presented to Council for adoption subject to the following amendments:**
 - a) The Precinct Map – Opportunities and for Marulan North to be amended to identify the haulage route as having a 250m buffer from development between Brayton Road, Ambrose Road and Red Hills Road through to the Hume Highway.**
 - b) The Consultation Report be amended to include commentary/to address the submission from Boral (dated 16 December 2019) and to expand upon the assessment of the Boral submission dated 18 December 2019.**
- 3. The Draft Urban and Fringe Housing Strategy be amended to identify a corridor to the east of the ridge line parallel to Crookwell Road, zoned E3 Environmental Management between Chinaman's Lane and Onslow Road following Crookwell Road, as a rural residential opportunity area for lots with a minimum allotment size of 10ha (reduced from 100ha). A 10ha lot size being identified in consideration of potential water quality impacts.**
- 4. The Draft Urban and Fringe Housing Strategy be amended to identify the area zoned RU2 Rural Landscape and E3 Environmental Management located on the eastern side of the Hume Highway, Highland Way through to Barber's Creek Road (north of the railway line) as a rural residential opportunity area for lots with a potential for 10ha minimum allotment size (reduced from 100ha), the 10ha lot size being identified in consideration of potential water quality impacts.**

The amendment was put and became the motion.

The motion was then put and carried.

Section 375A of the Local Government Act 1993 requires General Managers to record which Councillors vote for and against each planning decision of the Council, and to make this information publicly available.

In Favour: Crs Bob Kirk, Peter Walker, Alfie Walker, Margaret O'Neill and Carol James

Against: Crs Andrew Banfield and Leah Ferrara

CARRIED

Council take a 30 minute dinner recess at 7.30pm

Council resumed at 8.00pm

15.2 POST EXHIBITION REPORT - PLANNING PROPOSAL TO AMEND ZONING OF NO. 59 - 61 HOVELL STREET, GOULBURN

RESOLUTION 2020/225

Moved: Cr Andrew Banfield

Seconded: Cr Carol James

That:

1. The post exhibition report from the Business Manager Strategic Planning concerning the rezoning of Number 59 – 61 Hovell Street, Goulburn to R1 – General Residential be received.
2. Council undertake amendments to the Planning Proposal as exhibited to address suggested changes specified by Water NSW being:
 - (a) to include the outcome of the overall *Strategic Land and Water Capability Assessment (SLWCA) for Sewered Development* and map; and
 - (b) remove/modify the sentence stating the ‘*site is not identified as an area of High Conservation Value (HCV) within the SLWCA Maps*’ (page 14).
3. Council endorse the current Planning Proposal to amend the *Goulburn Mulwaree Local Environmental Plan 2009* to:
 - (a) rezone land known as Number 59-61 Hovell Street, Goulburn (being Lot 8 DP 832816), from RE1 Public Recreation to R1 General Residential under the *Goulburn Mulwaree Local Environmental Plan 2009*; and
 - (b) introduce a minimum allotment size of 1000m².
4. A Draft Instrument be prepared that is consistent with the above amendment.
5. The attached draft Site Specific Development Control Plan chapter for this precinct be publicly exhibited.
6. The Planning Proposal and relevant documentation be forwarded to the Department of Planning and Environment for making.

Section 375A of the *Local Government Act 1993* requires General Managers to record which Councillors vote for and against each planning decision of the Council, and to make this information publicly available.

CARRIED

In Favour: Crs Bob Kirk, Peter Walker, Andrew Banfield, Leah Ferrara, Alfie Walker, Margaret O'Neill and Carol James

Against: Nil

15.3 PROPOSED ROAD NAME FOR NEW ROAD APPROVED UNDER DA/0243/1718, 131 CLYDE STREET GOULBURN

RESOLUTION 2020/226

Moved: Cr Peter Walker

Seconded: Cr Leah Ferrara

That:

- 1. Council grant its consent for the proposed road name 'Gumnut Lane' for the proposed new road approved under MODDA/0012/1920 of DA/0243/1718 to enable the proposal to be publicly exhibited, and**
- 2. If no public submissions are received during the public exhibition period, the proposed road name 'Gumnut Lane' is gazetted with Geographical Names Board.**

CARRIED

15.4 HOVELL STREET MULTI LOT SUBDIVISION

RESOLUTION 2020/227

Moved: Cr Leah Ferrara

Seconded: Cr Carol James

That

- 1. The report from the Business Manager Property & Community Services and General Manager on the Hovell Street Multi Lot Subdivision be received.**
- 2. Council endorse in principle the general layout of the Hovell Street Multi Lot Subdivision to create 30 lots to allow this development to be lodged for a development application determination.**
- 3. The developers of the proposed subdivision at 30a Sloane Street fund \$87,500 for road construction costs from the spine road to their proposed development.**
- 4. If the developers of the proposed subdivision at 30a Sloane Street decline to fund the full cost of the access road being \$87,500 for road construction costs referred to in point 3, Council's Hovell Street Multi Lot Subdivision plan be amended to exclude the 931m2 parcel of 30a Sloane Street and the proposed spine road be replaced with an additional residential lot.**

CARRIED

15.5 REQUEST FOR FINANCIAL ASSISTANCE - ROTARY CLUB OF GOULBURN

RESOLUTION 2020/228

Moved: Cr Peter Walker

Seconded: Cr Carol James

That

- 1. The report from the Director Corporate & Community Services on Request for Financial Assistance – Rotary Club of Goulburn be received.**
- 2. Council support the 2020 Southern Tablelands Science and Engineering Challenge with the following funding from the 2020/21 Financial Assistance Budget:**
 - A cash contribution of \$3,000**
- 3. The funding be held pending confirmation of the event taking place this year.**

CARRIED

15.6 REQUESTS FOR FINANCIAL ASSISTANCE - BUNGONIA & DISTRICT HISTORICAL SOCIETY INC.

RESOLUTION 2020/229

Moved: Cr Leah Ferrara

Seconded: Cr Peter Walker

That

- 1. The report of the Director of Corporate & Community Services on Requests for Financial Assistance – Bungonia & District Historical Society Inc. be received.**
- 2. Council make a cash donation of \$2,479 out of the 2019/20 Financial Assistance budget to the Bungonia & District Historical Society Inc. for their project to install a plaque at the Bungonia cemetery.**

CARRIED

15.7 2021 YOUTH CONFERENCE

RESOLUTION 2020/230

Moved: Cr Margaret O'Neill

Seconded: Cr Peter Walker

That Council Move into Committee of the Whole.

Council moved into Committee of the whole at 8:13pm.

CARRIED

RESOLUTION 2020/231

Moved: Cr Alfie Walker

Seconded: Cr Carol James

That Council move back into Open Council.

Council moved back into Open Council at 8:29pm.

CARRIED

RESOLUTION 2020/232

Moved: Cr Carol James

Seconded: Cr Alfie Walker

That

- 1. The Report from the Business Manager Property & Community Services on the 2021 Youth Conference be received.**
- 2. Council approves hosting of the 2021 Youth Conference in Goulburn from 17 to 19 September 2021.**
- 3. Council allocates a maximum of \$25,000 in additional funds in the 2021/22 financial year's Events budget to sponsor the event including the payment of the booking fees for the Veolia Arena, Grace Millsom Centre, Ross Whittaker Basketball Stadium and any other Council facility from 17 to 19 September 2021.**

CARRIED

15.8 2020 STEAMPUNK VICTORIANA FAIR

RESOLUTION 2020/233

Moved: Cr Peter Walker

Seconded: Cr Alfie Walker

That Council Move into Committee of the Whole.

Council moved into Committee of the whole at 8:34pm.

CARRIED

RESOLUTION 2020/234

Moved: Cr Peter Walker

Seconded: Cr Alfie Walker

That Council move back into Open Council.

Council moved back into Open Council at 8:39pm.

CARRIED

RESOLUTION 2020/235

Moved: Cr Peter Walker

Seconded: Cr Leah Ferrara

- 1. That the report from the Business Manager Marketing, Events & Culture on the 2020 Steampunk Victoriana Fair be received.**
- 2. That the 2020 Steampunk Victoriana Fair not proceed in light of the COVID-19 restriction, and uncertainty around when restrictions on events and festivals may ease.**
- 3. The net balance of \$21,055 in the 2020/21 budget be transferred to an Events Reserve for use towards the October 2021 event, or an alternate event at the Goulburn Historic Waterworks.**

CARRIED

15.9 COUNCIL HARDSHIP POLICY AND COVID-19**RESOLUTION 2020/236****Moved: Cr Leah Ferrara****Seconded: Cr Peter Walker****That**

- 1. The Report of the Director Corporate & Community Services on Council Hardship Policy and COVID-19 be received.**
- 2. An addendum be added to the existing Hardship Policy stating the following:**
 - (a) If the ratepayer (business or residential) can demonstrate a decrease in income from the six month period from January to June 2019 to the six month period from January to June 2020 of in excess of 15%, they will be able to make arrangements to pay their rates and annual charges over a period of 18 months.**
 - (b) If that reduction exceeds 30% the repayment arrangements can extend to 2 years.**
 - (c) At the end of these periods all accounts are to be cleared up to the most recent instalment due.**
 - (d) Interest will continue to accrue in line with the allowable interest rates as determined by the Office of Local Government as follows:**
 - (i) July-December 2020 0%**
 - (ii) January 2021 onwards 7%**
 - (e) All applications will be determined by the Director of Corporate and Community Services after being assessed by Council's Revenue Section based on the information provided.**
 - (f) Any objections to the assessment of applications will need to be considered by Council.**
 - (g) This addendum will be reviewed in May 2021 taking into consideration the rate of recovery from the COVID-19 Pandemic.**
 - (h) The implementation of this policy be subject to the rate payers previous payment history and that allowance won't be given if a history of non-payment exists.**
- 3. The Application for Revenue Hardship Relief form be updated with a section to enable assessment under this addendum.**

CARRIED**15.10 MAKING OF RATES AND CHARGES****RESOLUTION 2020/237****Moved: Cr Andrew Banfield****Seconded: Cr Alfie Walker**

- 1. The report from the Director Corporate & Community Services on Making of Rates and Charges be received.**
- 2. Rates and charges in the 2020/21 Operational Plan commencing 1 July 2020 be made as detailed in the following tables:**

Ordinary Rates - s493 Local Government Act

Sub-Category	Ad Valorem Rate (c/\$)	Base Rate	Minimum Rate
Residential - General	0.19300	\$263.00	
Residential - Goulburn	0.43200	\$332.00	
Residential - Marulan	0.26000	\$251.00	
Business - General	0.89500		\$554.00
Business - Goulburn	0.89500		\$554.00
Business - Goulburn Town Centre	1.61100		\$554.00
Business - Marulan	0.89500		\$554.00
Mining	1.98700		\$554.00
Farmland	0.16700	\$534.00	

Domestic Waste Management - s496 Local Government Act

Category	Charge
Occupied – First Service (3 Bins)	\$381.00
Occupied – Subsequent Service (3 Bins)	\$381.00
Occupied – Subsequent Service (Red Bin)	\$258.00
Occupied – Subsequent Service (Yellow)	\$123.50
Occupied – Subsequent Service (Green Bin)	\$123.50
Unoccupied	\$38.00

Tarago

Category	Charge
Occupied (Recycling Only)	\$202.00

Other Waste Management Charges (Marulan) - s501 Local Government Act

Category	Charge
1 Service	\$322.50
2 Services	\$602.00
3 Services	\$916.00
4 Services	\$1,180.00
5 Services	\$1,450.00
6 Services	\$1,745.00
7 Services	\$2,025.00
8 Services	\$2,300.00
9 Services	\$2,600.00
10 Services	\$2,880.00

Rural Waste Charge - s501 Local Government Act

Category	Charge
Rural Waste Charge	\$140.00

Water Availability Charges (Goulburn/Run-O-Waters) - s501 Local Government Act

Category	Meter Size	Annual Charge
Water Availability - Vacant		\$172.00
Occupied	20mm	\$172.00
	25mm	\$270.00
	32mm	\$417.00
	40mm	\$682.00
	50mm	\$1,063.00
	65mm	\$2,079.00
	75mm	\$2,708.00
	80mm	\$2,708.00
	100mm	\$4,250.00
	150mm	\$9,575.00

Water Availability Charges (Marulan) - s501 Local Government Act

Category	Meter Size	Annual Charge
Water Availability - Vacant		\$246.00
Occupied	20mm	\$246.00
	25mm	\$284.00
	32mm	\$585.00
	40mm	\$978.00
	50mm	\$1,522.00
	65mm	\$2,980.00
	75mm	\$3,885.00
	80mm	\$3,885.00
	100mm	\$6,085.00
	150mm	\$13,728.00

Water Consumption Charges (Goulburn/Run-o-Waters) - s502 Local Government Act

Category	Meter Size	Tariff 1 (per kl)	Tariff 2 (per kl)	Tariff 2 Trigger (kl per day)
Occupied	20mm	\$2.82	\$3.81	Over 0.80
	25mm	\$2.82	\$3.81	Over 1.30
	32mm	\$2.82	\$3.81	Over 2.00
	40mm	\$2.82	\$3.81	Over 3.30
	50mm	\$2.82	\$3.81	Over 5.15
	65mm	\$2.82	\$3.81	Over 9.15
	75mm	\$2.82	\$3.81	Over 13.15
	80mm	\$2.82	\$3.81	Over 13.15
	100mm	\$2.82	\$3.81	Over 20.55
	150mm	\$2.82	\$3.81	Over 46.23

Water Consumption Charges (Marulan) - s502 Local Government Act

Category	Meter Size	Tariff 1 (per kl)	Tariff 2 (per kl)	Tariff 2 Trigger (kl per day)
Occupied	20mm	\$2.82	\$3.81	Over 0.80
	25mm	\$2.82	\$3.81	Over 1.30
	32mm	\$2.82	\$3.81	Over 2.00
	40mm	\$2.82	\$3.81	Over 3.30
	50mm	\$2.82	\$3.81	Over 5.15
	65mm	\$2.82	\$3.81	Over 9.15
	75mm	\$2.82	\$3.81	Over 13.15
	80mm	\$2.82	\$3.81	Over 13.15
	100mm	\$2.82	\$3.81	Over 20.55
	150mm	\$2.82	\$3.81	Over 46.23

Backflow Device Charges - s501 Local Government Act

Category	Annual Charge
First Device Per Property	\$66.00
Subsequent Device Per Property	\$34.00

Sewerage Charges (Goulburn) – s501 Local Government Act

Category	Meter Size	Annual Charge
Residential Occupied		\$768.00
Residential Vacant		\$422.00
Flats & Unit (Per Unit)		\$768.00
Business	20mm	\$422.00
	25mm	\$663.00
	32mm	\$1,085.00
	40mm	\$1,699.00
	50mm	\$2,623.00
	65mm	\$4,477.00
	75mm	\$6,790.00
	80mm	\$6,790.00
	100mm	\$10,557.00
	150mm	\$15,718.00

Sewerage Charges (Marulan) – s501 Local Government Act

Category	Meter Size	Annual Charge
Residential Occupied		\$929.00
Residential Vacant		\$683.00
Flats & Unit (Per Unit)		\$929.00
Business	20mm	\$683.00
	25mm	\$1,045.00
	32mm	\$1,613.00
	40mm	\$2,497.00
	50mm	\$3,890.00
	65mm	\$6,613.00
	75mm	\$10,045.00
	80mm	\$10,045.00
	100mm	\$15,675.00

Sewerage Consumption Charges (Goulburn) – s502 Local Government Act

Category	Meter Size	Charge (per kl)
Residential Occupied*		N/A
Flats & Unit (Per Unit)*		N/A
Business	20mm	\$2.99
	25mm	\$2.99
	32mm	\$2.99
	40mm	\$2.99
	50mm	\$2.99
	65mm	\$2.99
	75mm	\$2.99
	80mm	\$2.99
	100mm	\$2.99
	150mm	\$2.99
* Usage Component included in Annual Charge		

Sewerage Consumption Charges (Marulan) - s502 Local Government Act

Category	Meter Size	Charge (per kl)
Residential Occupied*		N/A
Flats & Unit (Per Unit)*		N/A
Business	20mm	\$2.99
	25mm	\$2.99
	32mm	\$2.99
	40mm	\$2.99
	50mm	\$2.99
	65mm	\$2.99
	75mm	\$2.99
	80mm	\$2.99
	100mm	\$2.99
	150mm	\$2.99
* Usage Component included in Annual Charge		

Liquid Trade Waste Charge – s501 Local Government Act 1993

Category	Annual
Category 1	\$120.00
Category 2	\$130.00
Category 3	\$470.00

CARRIED

15.11 STATEMENT OF INVESTMENTS & BANK BALANCES

RESOLUTION 2020/238

Moved: Cr Peter Walker

Seconded: Cr Carol James

That the report by the Director Corporate & Community Services and the Business Manager Finance & Customer Service on the Statement of Investments and Bank Balances be received.

CARRIED

15.12 MONTHLY FINANCIAL REPORT

RESOLUTION 2020/239

Moved: Cr Peter Walker

Seconded: Cr Leah Ferrara

That the report by the Director Corporate & Community Services and the Business Manager Finance & Customer Service on the Monthly Financial Report be received and noted for information.

CARRIED

15.13 GOULBURN MULWAREE YOUTH COUNCIL MEETING NOTES - 29 MAY 2020

This matter was not considered as the attachment was not included.

15.14 LOCAL EMERGENCY MANAGEMENT MEETING - MINUTES 2 JUNE 2020

RESOLUTION 2020/240

Moved: Cr Peter Walker

Seconded: Cr Carol James

That:

- 1. The report from the Director Operations on the minutes from the Local Emergency Management Committee meeting held 2 June 2020 be received.**
- 2. A thank you to the Committee members be expressed by Council.**

CARRIED

15.15 MINUTES OF THE TRAFFIC COMMITTEE MEETING HELD ON 4 JUNE 2020

RESOLUTION 2020/241

Moved: Cr Andrew Banfield

Seconded: Cr Carol James

That

- 1. The report from Director of Operations in regards to the Traffic Committee minutes from Thursday 4 June 2020 be received.**
- 2. Council to submit an application to TfNSW Freight Branch to implement a 15 tonne load limit along Lagoon and Auburn Streets.**

CARRIED

15.16 EXTERNAL MEETING MINUTES

RESOLUTION 2020/242

Moved: Cr Alfie Walker

Seconded: Cr Leah Ferrara

That the report from the General Manager on the Peppertree Boral Community Consultative Committee Meeting minutes from 17 March 2020 be received.

CARRIED

15.17 OPERATIONS DIRECTORATE REPORT MAY 2020

RESOLUTION 2020/243

Moved: Cr Margaret O'Neill

Seconded: Cr Peter Walker

That the activities reported for May 2020 by the Director Operations be received and noted for information.

CARRIED

15.18 CORPORATE & COMMUNITY SERVICES DIRECTORATE REPORT MAY 2020

RESOLUTION 2020/244

Moved: Cr Alfie Walker

Seconded: Cr Leah Ferrara

That the activities report by the Director Corporate & Community Services be received and noted for information.

CARRIED

15.19 UTILITIES DIRECTORATE REPORT - MAY 2020

RESOLUTION 2020/245

Moved: Cr Leah Ferrara

Seconded: Cr Carol James

That the report from the Director Utilities be received and noted for information.

CARRIED

15.20 PLANNING & ENVIRONMENT DIRECTORATE REPORT MAY 2020

At 9:30 pm, Cr Peter Walker left the meeting. At 9:31 pm, Cr Peter Walker returned to the meeting.

RESOLUTION 2020/246

Moved: Cr Peter Walker

Seconded: Cr Leah Ferrara

That the activities report by the Director Planning & Environment be received and noted for information.

CARRIED

15.21 COUNCILLOR BRIEFING SESSION SUMMARY

RESOLUTION 2020/247

Moved: Cr Leah Ferrara

Seconded: Cr Margaret O'Neill

That the report from the General Manager on Councillor Briefing Session Summary be received.

CARRIED

15.22 APPROVAL OF VOLUNTARY MANAGEMENT PROPOSAL - PART TARAGO RAIL CORRIDOR, TARAGO

RESOLUTION 2020/248

Moved: Cr Peter Walker

Seconded: Cr Leah Ferrara

That:

- 1. The report of the Director Planning & Environment on the Approval of Voluntary Management Proposal - Part Tarago Rail Corridor, Tarago be received.**
- 2. Council seeks community feedback through TADPAI and Tarago Times to relay any further community issues on the lead contamination that is effecting the Tarago community back to Transport NSW.**
- 3. Council seeks clarification from the EPA on the exact extent of the area covered by the imposed management action proposal.**

CARRIED

15.23 DA/0277/1920 - SUBDIVISION, 8-10 COMBERMERE STREET, GOULBURN

RESOLUTION 2020/249

Moved: Cr Peter Walker
Seconded: Cr Margaret O'Neill

That Council Move into Committee of the Whole.

Council moved into Committee of the whole at 9:39pm.

CARRIED

RESOLUTION 2020/250

Moved: Cr Alfie Walker
Seconded: Cr Carol James

That Council move back into Open Council.

Council moved back into Open Council at 9:55pm.

CARRIED

RESOLUTION 2020/251

Moved: Cr Alfie Walker
Seconded: Cr Leah Ferrara

That:

1. The report of the Director Planning & Environment be received.
2. The General Manager is authorised to enter into negotiations regarding the proposal for a stormwater detention basin on Council land.
3. Any draft planning agreement in relation to the use of Lot 74 DP35541 for stormwater detention purposes be subject to further consideration and determination by Council.

CARRIED

16 CLOSED SESSION

Council must resolve to move into Closed Session to deal with any items under s10 *Local Government Act 1993*.

There were no closed session reports for determination.

17 CONCLUSION OF THE MEETING

The Meeting closed at 9.56pm.

The minutes of this meeting were confirmed at the Ordinary Council Meeting held on 21 July 2020.

.....
Cr Bob Kirk
Mayor

.....
Warwick Bennett
General Manager

