

Wollongbar Planning and Environmental Study



Mapping

© NSW Spatial Services 2017. Although all care is taken in the preparation of plans within this document and it's attachments, Ballina Shire Council accepts no responsibility for any misprints, error, omissions or inaccuracies. The information contained within each plan is for pictorial representation only. Do not scale. Accurate measurements should be undertaken by survey.



Table of Contents

Table of Contents	2
Chapter 1 – Introduction and Background	7
1.1 Wollongbar Overview	7
1.2 Planning History	9
1.3 Strategic Planning Framework	11
1.4 Wollongbar / Alstonville Buffer Area	15
1.5 Location, Geology and Climate	16
1.6 Aboriginal and European Occupation	17
1.7 Origin of Wollongbar	18
1.8 Heritage – the Built and Natural Environment	20
Chapter 2 – Environmental Characteristics of Wollongbar	23
2.1 Australian Heritage Database	24
2.2 NSW Wildlife Atlas	27
2.2.1 Fauna	27
2.2.2 Flora	28
Chapter 3 – Demographic Characteristics	30
3.1 Geographical Boundaries of Wollongbar	30
3.2 Wollongbar Demographic Profile 2016	30
3.3 Population Growth, Housing Supply and Household Size	31
3.4 What Changes Have Occurred in the Wollongbar – McLeans Ridges Age Structure Between 2011 and 2016?	31
3.5 New Dwelling Commencements – Wollongbar	33
3.6 What Size Houses Are Being Built in Wollongbar?	34
3.7 What changes have occurred to dwelling types built in Wollongbar between 2011 and 2016?	
3.8 Wollongbar Housing Tenure Changes 2011 to 2016	38
3.9 Retirement and Aged Care Accommodation in Wollongbar	39
3.10 Place of Origin of New Housing Lot Buyers in Wollongbar	40
3.11 Median Dwelling Sale Price in Wollongbar April 2017 to April 2018	40
3.12 Public School Enrolments 2006 to 2016	41
3.13 Wollongbar TAFE Enrolments 2006 to 2017	43
3.14 Wollongbar Employment Industry Sectors Changes 2011 to 2016 – Planning Implic	
Chapter 4 – Residential Growth Potential to 2038	
4.1 What Dwelling Densities Are Being Achieved in the WUEA?	
4.2 United Protestant Association of NSW (UPA) WUEA Landholding	
4.3 Remaining Dwelling (Lot) Capacity Within the WUEA	
4.4 Remaining Dwelling (Lot) Capacity Within Non-WUEA Wollongbar Urban Areas	
4.5 Total Estimated Potential and Vacant Residential Lots (Dwellings) in Wollongbar	

4.6 Population Change 1971 – 2036; Planning Implications	49
Chapter 5 – Wollongbar's Future Vision	51
5.1 Pre Study Community Engagement – What did we do?	51
5.2 Pre Study Community Feedback	52
5.2.1 What Did People Say? – Face to Face Interview Results	52
5.3 A Vision for Wollongbar's Future	55
Chapter 6 – Vision Element One: Maintaining a Sense of Community	57
6.1 Sense of Community – A Definition	57
6.2 Maintaining a Sense of Community	57
6.3 How safe is our Community?	58
Chapter 7 – Vision Element Two: Continued Growth to Create Well Planned Housing Choice and Employment Opportunities	61
7.1 Predicted Growth to 2038 – A Summary	61
7.2 Potential Impediments to Conventional Housing Supply	61
7.3 SWOT Analysis of Potential Housing Supply Options to Offset UPA Land	62
7.4 Potential Housing Supply Options to Offset UPA Land	62
7.4.1 Expansion of Wollongbar Village Urban Footprint	62
7.4.2 Dual Occupancy Potential Within Existing R2 Zone Outside WUEA	63
7.5 Labour Force and Employment Implications of Increasing Population	65
7.6 Creating Employment Opportunities Through Land Supply	65
7.7 Employment Opportunities - Rezoning Land for Industrial Purposes Adjoining the Russellton Industrial Estate	66
7.8 Employment Opportunities - Undeveloped Business Land in Wollongbar	70
7.9 Alstonville Waste Water Treatment Plan Masterplan	72
	73
Chapter 8 - Vision Element Three: Provision of Adequate Levels of Infrastructure to Support Growth	74
8.1 Pedestrian Access and Mobility Plan 2018/19 – 2026/27 (PAMP)	74
8.2 Ballina Shire Bike Plan 2017	75
8.3 Ballina Shire Open Space and Community Facilities Contribution Plan 2016	77
8.4 Wollongbar Sports Fields	78
Chapter 9 – Conclusions – A Way Forward	79
Annexures	82
Annexure 1 – Extract from Ballina Shire Growth Management Strategy 2012	82
Annexure 2 - Two BioNet Atlas of NSW Search Results	84
Annexure 3 – Wollongbar 2017 Community Survey Results	
Annexure 4 – Wollongbar Pre-Study Community Engagement Plan 2017	88
Annexure 5 – Preliminary SWOT Analysis of Potential Wollongbar Urban Suitability Sites	89

Preface

This study has been prepared following initial consultation with the Wollongbar community during April and May 2017. This consultation sought to identify issues of significance and the community's future aspirations for their village.

The study was initially released in draft format during 2018 to enable the Wollongbar community to review its contents, suggestions and ideas.

The Council at its Ordinary meeting on 27 June 2019 adopted this study.

Accompanying this study is the Wollongbar Strategic Plan 2019 – 2039.

Jack Kibbeen (Kappean), King of Wollongbar

The following is an extract from the ABC North Coast NSW web site news story 29 May 2014 – *Spinning yarns with Aboriginal elders*:

Lismore clan group Indigenous Elder Roslyn Sten credits the naming of Wollongbar to her great great grandfather Jack Kibbeen.

Jack Kibbeen worked to clear the land and labour on the farm of white settler W H Smith, who took over the area for agricultural use.

"Mr Smith asked him what the name of the area was, and he said 'Wollongbar'."

It is documented that Mr Smith had a brass breast plate made for Jack Kibbeen; decorated with a kangaroo and an Indigenous man holding a spear and engraved with the words 'Jack Kibbeen, King of Wollongbar'.

Aboriginal breastplates were crescent-shaped brass neck ornaments, created by colonial Governor Lachlan Macquarie (Governor of New South Wales 1810 – 1821) for Aborigines to appoint a 'leader' to communicate between black and white.¹

The Wooloongbah country stretches from Lismore to Ballina.²

Jack Kibbeen was a chief of the Arakwal tribe who were part of the Bundjalung people³.

The image below has been extracted from the Bonhams (auction house) web site. The Bonhams web site indicates that the copper breast plate was sold at auction for \$3,360 on 20 November 2011. There was controversy surrounding the sale of the breastplate with Aboriginal elders David Kapeen and Rosslyn Sten signing affidavits stating that they believed the item to have been stolen from the Lismore museum⁴.



¹ The Chronicle news story 31 July 2009, https://www.thechronicle.com.au/news/search-for-ancestors-breastplate/286349/

² Ibid

³ Bonhams web site https://www.bonhams.com/auctions/19687/lot/397/

⁴ Northern Star news story 17 November 2011 "Bonhams won't withdraw breastplate"

Chapter 1 – Introduction and Background

Ballina Shire Council has a program to prepare strategic plans to guide the future of the urban centres in the shire. The program commenced in 2014, with plans for Ballina, Wardell and Alstonville now completed. Council aims to complete the plan for Wollongbar by late - 2018.

1.1 Wollongbar Overview

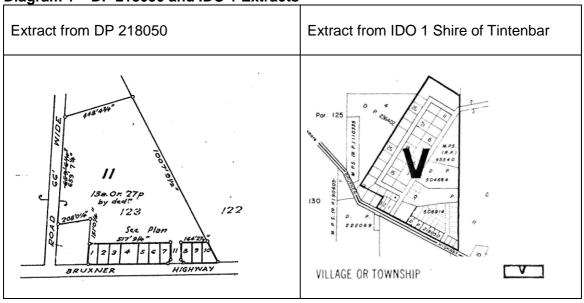
Wollongbar is located on the Alstonville Plateau 1.5 km west of Alstonville, 17 km west of Ballina and 21 km east of Lismore.

Residential development in Wollongbar commenced in 1963 with the release of ten allotments, and by 1971 the village comprised 38 dwellings and 68 vacant lots.

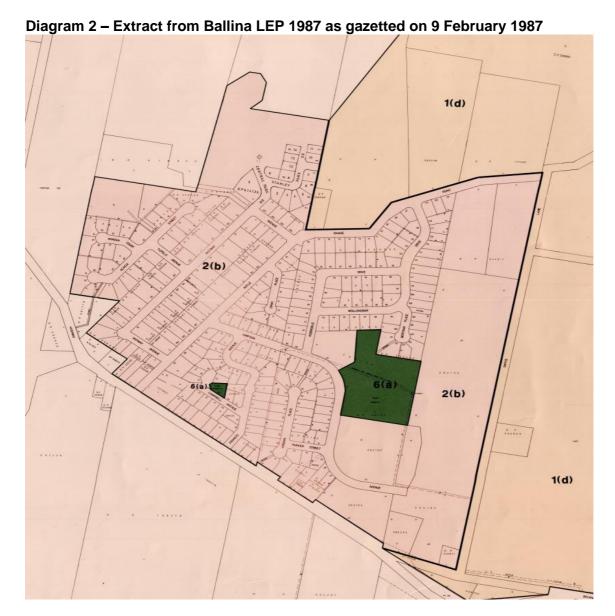
Diagram 1 below contains an extract from the original Wollongbar village subdivision plan Deposited Plan (DP) 218050. This plan was registered by the Registrar General for New South Wales on 30 April 1963 and created the first 10 residential lots at Wollongbar. The subdivision is located immediately east of Rifle Range Road and excludes the corner service station site.

Also contained within Diagram 1 is an extract from the Tintenbar Shire Interim Development Order No 1 (IDO1) which shows the village boundaries as they existed in May 1965.

Diagram 1 - DP 218050 and IDO 1 Extracts



By 1987 Wollongbar had grown as shown by the pink colour on the extract from Ballina Local Environmental Plan 1987 (gazetted on 9 February 1987) as shown in Diagram 2.



The large lots on the eastern side of the village were subdivided in the period 1989 to 2003 (Damacia Drive and Bletchingly Street 1989, Cerreto Circuit and Dalmacia Drive 1991, Hellyar Drive and Cornwall Place 2002 – 2003).

In 2002 the Wollongbar Urban Expansion Area (WUEA) was created with the rezoning of 104.8 hectares of Rural 1(d) Urban Investigation zoned land. The WUEA is located adjoining the then northern urban boundary of Wollongbar village. The rezoning resulted in an additional 79 hectares of land being zoned as 2(b) Village Area and 25.8 hectares being zoned as 7(d) (Scenic / Escarpment) Zone.

In 2006 it was estimated that the WUEA would result in 1067 dwellings being constructed which would provide housing for 2880 people.⁵ By June 2008 dwelling yield and population estimates had been revised down to 928 dwellings and 2500 persons as a result of constraints imposed by topography⁶.

In May 2011 the first residential lots were created in the WUEA and were located in the Avalon Estate (Avalon Avenue, Lillian Way, Clovelly Place). The construction of Plateau Drive during 2011, at an approximate cost of \$4 million, enabled subdivisions further within the WUEA to proceed. Callicoma Court and lots in Plateau Drive were created in November 2011. Spring Creek Place and Bolwarra Circuit were created in early 2014.

⁵ See DCP 2006 – Chapter 15 – Wollongbar Urban Expansion Area, p28

⁶ See Wollongbar Urban Expansion Area Infrastructure Strategy (adopted 26 June 2008)

It was also in May 2011 that the Bruxner Highway bypass was opened significantly decreasing the impact of motor vehicle traffic and associated noise for many Wollongbar residents.

1.2 Planning History

The reason for the preparation of a strategic plan for Wollongbar also relates to Council's previous investigations into a third plateau village and the associated 2001 resolution set out below.

In September 2001 the Council resolved to:

- 1. Discontinue the current investigations into the establishment of a third village on the Alstonville Plateau;
- 2. Reconfirm the current short to medium term strategic approach for the Alstonville Plateau, ie:
 - (a) reaffirm the 'no growth' policy for Alstonville;
 - (b) continue medium term residential release within the existing planned footprint of Wollongbar;
 - (c) continue not to encourage 'edge' rezonings in the localities of Alstonville and Wollongbar.
- 3. Subject to population growth following or exceeding projections, Council reconsider, in about 10 years time, a suitable location for future residential development and / or a third village on the Alstonville Plateau.

The report considered by the Council in 2001 indicated that of the 793 public submissions considered, some 73.3% of submission respondents did not support a third village on the Alstonville Plateau. This compared with 12.5% of respondents who supported the concept and 3.8% of respondents who supported the expansion of Alstonville and Wollongbar beyond their then current limits⁷.

Wollongbar's nominated target population in 2000 was approximately 4500 people8.

In 2001 Wollongbar (State Suburb boundaries) had a population of 2,297 people (Usual Resident Population). By 2016 this had increased to 2828 people (Usual Resident Population).

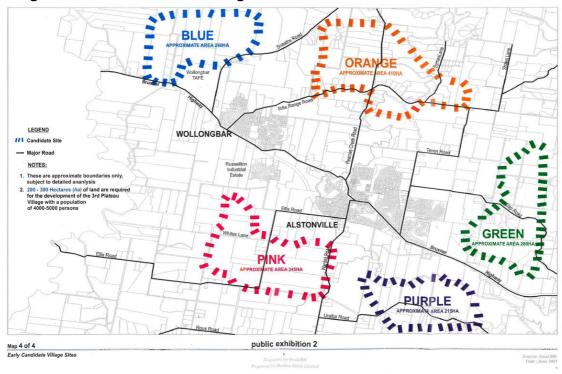
[Note: The Wollongbar State Suburb boundaries used by the Australian Bureau of Statistics also incorporate rural areas outside of the Wollongbar village urban boundaries. Given this, and also as a result of changes made to the geographical area covered by the census boundaries, it is more difficult to use census information to gain an accurate picture of demographic changes occurring in Wollongbar village from one census period to another. Refer Chapter 3 for further information.]

The candidate new village sites considered by the Council in 2001 are shown in Diagram 3 below. The third plateau village concept was originally developed in the 1970s as an alternative to urban sprawl (expansion of the existing villages into adjoining farmland). It was proposed that the third village would provide housing for approximately 5,000 people.

⁷ GeoLINK – 3rd Plateau Village, Report on Phase 2 – 3rd Plateau Village Investigations, 2001, p12

⁸ Ballina Urban Release Strategy - 2000, p84

Diagram 3 – 2001 Candidate Village Sites



In July 2012 the Council again considered growth management options for the shire and adopted the Ballina Shire Growth Management Strategy (BSGMS). The BSGMS referenced revisiting the third plateau village concept within the locality and strategic actions for Wollongbar. The BSGMS is discussed in greater detail in Section 1.3.

Wollongbar has been identified within the BSGMS as one of the main future growth areas in the Shire.

To facilitate a more detailed review of the opportunities available and issues impacting on the villages of Wollongbar and Alstonville the Council, at its Ordinary Meeting held on 28 April 2016, resolved to prepare place based strategic plans for Wollongbar and Alstonville. The report to the Council indicated that these projects were not intended to directly address the concept of the third plateau village or rural planning issues on the Alstonville Plateau.

The draft Wollongbar Planning and Environmental Study is the mechanism through which issues impacting on, and opportunities available, for Wollongbar, have been examined. The draft Wollongbar Strategic Plan has been developed in response to identified issues, as well as community comments received during the pre-study consultation period, such as population growth, village character and housing choice.

The *draft Wollongbar Strategic Plan 2018 – 2038* contains specific actions to guide the future of Wollongbar over the next 20 year period.

The following section briefly outlines the strategic planning framework applicable to Wollongbar which has been considered during the preparation of this study.

1.3 Strategic Planning Framework

North Coast Regional Plan 2036 (NCRP 2036)

The NCRP 2036 was prepared by the NSW State Government and released by the Minister for Planning in March 2017.

Wollongbar is referenced within the NCRP 2036 as fulfilling local service needs. The plan supports employment lands and jobs at Wollongbar, together with the protection of important farmland. It also supports the development of the agricultural sector and agribusiness.⁹

No provision was made within the NCRP 2036 for an expansion of the Wollongbar urban growth area (land currently zoned for urban purposes) beyond its current zoned limits.

The NCRP 2036 did not make any provision for a third plateau village. Whilst it is the case that a third village concept was investigated by Council in the period 1996 – 2001, further investigation of this concept has to date been discontinued following previous extensive community consultation.

A direction issued by the NSW Minister for Planning in April 2017 (Section 117(2) *Direction 5.10 Implementation of Regional Plans*) requires that when a council prepares a planning proposal (new or updated local planning controls) that it be consistent with a Regional Plan released by the Minister.

As was the case with respect to the State Government's previous 2006 Far North Coast Regional Strategy (FNCRS), the NCRP 2036 also requires each council within the region to develop local growth management strategies. These strategies are the means through which changing housing needs and ageing in place strategies are addressed.

The NCRP 2036 does not set a dwelling target for Ballina Shire to the year 2036. The previous FNCRS set a target of an additional 8400 dwellings in the period 2006 to 2031. The NCRP 2036 does project the Shire population to increase to 45,850 (41,790 in 2016) and dwellings to increase to 22,000 (19,107 in 2016) by 2036.

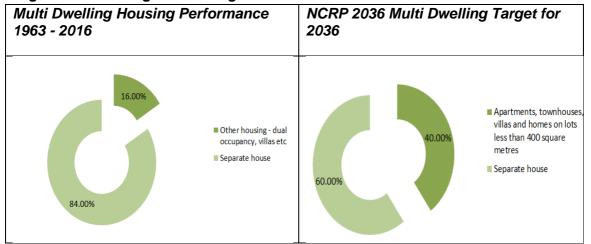
The NCRP 2036 encourages housing diversity through an Action which stipulates that a minimum of 40 per cent of new housing is to be delivered in the form of dual occupancies, apartments, townhouses, villas, or dwellings on lots less than 400 square metres by the year 2036.¹⁰

Diagram 4 below indicates Wollongbar's housing choice performance compared to the State Government's target for 2036.

⁹ North Coast Regional Plan 2036 page 60

¹⁰ North Coast Regional Plan 2036, p 56

Diagram 4 - Wollongbar Housing Performance Past and Future



In 2016, 84% of occupied private dwellings in Wollongbar were in the separate house category (69% in the Ballina Shire) ¹¹. This was a reduction on the 2011 results when 89% of occupied private dwellings in Wollongbar were in the separate house category (68.5% in the Ballina Shire).

Demand for new housing in Wollongbar is currently being satisfied through residential subdivisions which cater predominantly for single dwelling houses (separate house) with only a limited number of dual occupancy suitable lots being provided. Although permitted with Council consent in the R3 zoned areas, no medium density housing products, such as villas, townhouses, terraces or the like (multi dwelling housing), are currently being produced within the Wollongbar Urban Expansion Area (WUEA).

Ballina Shire Growth Management Strategy 2012 (BSGMS)

The BSGMS was adopted by the Council on 26 July 2012 in response to the requirements contained within the 2006 Far North Coast Regional Strategy (FNCRS). Its adoption facilitated a link between the strategies contained within FNCRS and the subsequent Ballina Local Environmental Plan 2012 (BLEP 2012) which came into effect in February 2013.

Annexure 1 to this study contains an extract from the BSGMS which specifically relates to Wollongbar. The Wollongbar Locality Objectives and Strategic Actions contained within the BSGMS are reproduced in Table 1 below:

Table 1 - Extract from Ballina Shire Growth Management Strategy 2012

Locality Objectives		Strategic Actions
 Maintain the low scale re of the village. Reinforce the status of Riestate as the dominant hub and industrial centre. Provide for the infrastructure growing community, increcreational facilities and of Manage Aboriginal, Eurnon-Aboriginal cultural haccordance with best practice. 	ussellton Industrial local employment ture needs of the luding sport and community halls. opean and other eritage values in	 Accommodate further population growth through implementation of the Development Control Plan for WUEA via the development assessment process. Plan for the provision of additional sporting facilities to service the increasing population. Maintain the urban buffer / inter-urban break between Wollongbar and Alstonville. Revisit the Third Plateau Village concept. Manage and/or promote Aboriginal, European and other non-Aboriginal cultural heritage values in accordance with relevant stakeholders.

¹¹ In 2016 94.7% of dwellings were occupied and 5.3% (59) unoccupied. In 2011 only 1.5% (13) were unoccupied.

The planning and environmental study and associated strategic planning processes for Wollongbar provides a mechanism through which the Locality Objectives and Strategic Actions contained in the BSGMS may be reviewed.

Ballina Retail Strategy 2003 (BRS)

The BRS was prepared by Council and examined retailing and commercial activity within Wollongbar and Alstonville. It concluded that Wollongbar was a local centre and Alstonville was a district level centre (providing services beyond the local area).

In terms of factors considered to impact on retailing within Wollongbar, the BRS concluded that population growth, and the then proposed Bruxner Highway Bypass, were the main impacting factors. The "target" resident population for Wollongbar was nominated 4,500 people.

The BRS nominated the following Retail Strategies of relevance to Wollongbar:

- Maintain the respective hierarchical functions of Wollongbar (local centre) and Alstonville (district centre),
- Retain the existing boundaries of the commercial centres within Alstonville and Wollongbar, and
- Maintain the integrity of the Russellton Industrial Estate by consistently applying clause 27 of Ballina LEP 1987 (Permits, with consent, retailing of bulky goods within the industrial zone).

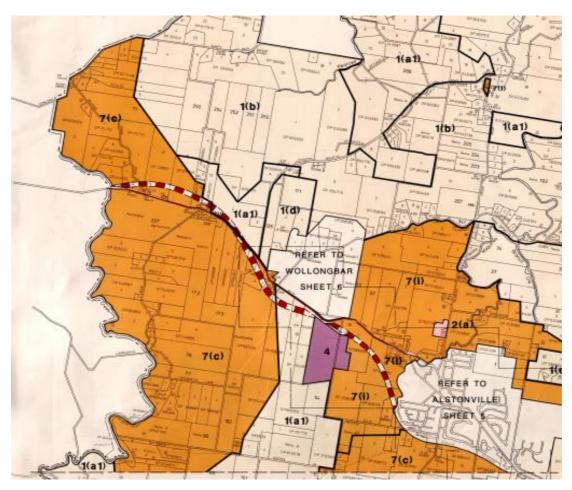
In respect to bulky goods retailing being permitted within the Russellton Industrial Estate, it is noted that the IN1 General Industrial zone, now applicable to this estate under the provisions of BLEP 2012, does not permit bulky goods retailing.

Bulky goods retailing is permitted within the B5 Business Development and B4 Mixed Use zones both of which are located at Ballina and reinforce that centre's position on top of the shire's retail hierarchy.

Ballina Local Environmental Plan 1987 (BLEP 1987)

BLEP 1987 is still in force over the 7 (i) Urban Buffer and 7(c) Water Catchment environmental protection zoned land located in close proximity to Wollongbar village. These areas are nominated as a "Deferred Matter" in Ballina Local Environmental Plan 2012 (BLEP 2012). An extract from the originally gazetted Ballina LEP 1987 zoning map which shows the location of the 7(c) and 7(i) zones in close proximity to Wollongbar is contained within Diagram 5 below.

Diagram 5 - Extract from Ballina LEP 1987 as gazetted showing the location of the 7(c) and 7(i) zones



The Council, at its Ordinary Meeting held on 27 April 2017, gave further consideration to preparing a planning proposal which would transition environmental zones, including the 7(i) Environmental Protection (Urban Buffer) zone, to suitable zones contained within Ballina LEP 2012. The Council resolved to retain all deferred areas the subject of an environmental protection zone under the Ballina Local Environmental Plan 1987 as deferred areas (having the effect that the Ballina LEP 1987 will continue to apply). Previously proposed environmental zones were unable to be incorporated within BLEP 2012 due to the State Government's Northern Councils E zone review process. This process prevented the five Far North Coast councils from incorporating environmental zones within local environmental plans made in the period September 2012 to March 2016.

Ballina Local Environmental Plan 2012 (BLEP 2012)

BLEP 2012 has applied to the urban areas of Wollongbar and to the rural areas located generally on its northern and southern sides since 4 February 2013. An extract from BLEP 2012 is contained in Diagram 6 below.

BLEP 2012 contains the legislative provisions through which land use planning is regulated in Wollongbar. Provisions of relevance include a 8.5 metre building height limit (with the exception of the B1 zoned area, which has a 9.0 metre building height

limit), and a minimum lot size for R2 and R3 zoned areas which varies between 600m² and 800m² depending on location.

1187475 325820 DM 858419 1046117 845719 815112 R2 R₂ R3 R2 1213425 RE1 R2 R2 R2 1171873 R3 R3 RE1 RE1 710464 R3 R3 R3 WOLLONGBAR 1212249 RE1 R3 R3 R2 578242 R3 R3 1168781 622 584947 RE1 RE1 RE1 R3 827449 ALSTONVILLE DM R3 1205436 R3 709280 749736 B1/ R3 R3 R3 622 22 1059476 116878 RE1 749736 RE1 1059476 35374 1059476 R2 881811 RE1 1135349 IN1 RE1 059499 RE1 NSW Spatial Services 2018. This map is illustrative and Ballina Shire Council.

Diagram 6 – Land Zoning Plan for Wollongbar Village and Surrounds BLEP 2012 Extract December 2017

1.4 Wollongbar / Alstonville Buffer Area

The concept of a rural buffer separating plateau villages had its genesis in the mid 1970s when the then Tintenbar Shire Council promoted the Three Plateau Villages Strategy. The 1975 Tintenbar Land Use Plan promoted a concept where Alstonville would grow to a population of 3000, Wollongbar 2300 and a third plateau village would be established¹².

A rural buffer was proposed to separate the three villages so as to maintain the individuality and integrity of each living area. The concept of a buffer between Wollongbar and Alstonville was subsequently incorporated into the Ballina Shire Local Environmental Study in 1983 which preceded the preparation of Ballina LEP 1987.

The rural buffer was created in February 1987 with the Gazettal of Ballina LEP 1987 which made provision for the 7(i) Environmental Protection (Urban Buffer) Zone between Wollongbar and Alstonville. The primary objective of this zone is:

... to create a rural buffer in the locality of Alstonville and Wollongbar and to prevent development of an urban character within any part of the zone which is likely to be seen by existing or likely future residents of the villages of Alstonville and Wollongbar or from a major road in the locality.

¹² GeoLINK – 3rd Plateau Village, Report on Phase 2 – 3rd Plateau Village Investigations, 2001, p3. These estimates conflict with estimates contained within the adopted strategy document of 1975 which indicates a population estimate of 4500 for Alstonville and 2500 for Wollongbar. It is assumed that the lower population targets would be the trigger for the establishment of the third village. Refer p83 of the report to Ballina Council on 27/4/1995.

In December 2017 the Council adopted the Alstonville Strategic Plan 2017 to 2037. The strategic plan and the associated planning and environmental study for Alstonville considered issues relating to the retention of the rural buffer which separates Alstonville from Wollongbar. This issue was also the subject of a number of detailed public submissions. The Council subsequently adopted the Alstonville Strategic Plan which contains the following strategic action:

Advocate a policy position which discourages proposals which seek to introduce urban style development within the rural area which separates Alstonville from Wollongbar and from farmland designated as being of State and Regional significance.

Retain the inter-urban break between Alstonville and Wollongbar.

1.5 Location, Geology and Climate

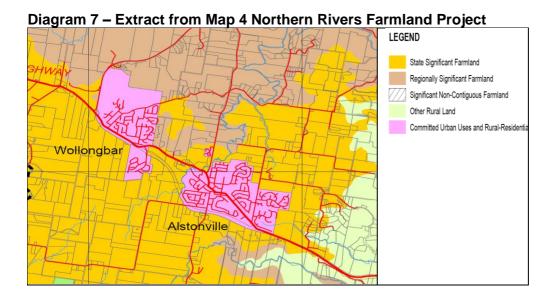
Wollongbar is located at a latitude of 28.49 degrees south and a longitude of 153.24 degrees east, in an area known as the Alstonville Plateau, within the North Coast Region of NSW. The Alstonville Plateau covers an area of approximately 100 square kilometres centred on the town of Alstonville, comprising approximately 20% of Ballina Shire.¹³

Much of the Alstonville Plateau was covered by the 'Big Scrub' prior to European settlement in the mid-1800s.

The "Big Scrub" was considered to be the largest continuous tract of sub-tropical rainforest in Australia. The "Big Scrub" generally relates to the land unit situated on a low basaltic plateau forming a part of the Mount Warning Shield Volcano.¹⁴

The Alstonville Plateau has a distinctive geology and climate.

The locality is characterised as containing highly fertile soils classified as being of State and regional agricultural significance in the Northern Rivers Farmland Project (Feb 2005). These soils generally consist of well drained red basaltic (Kraznozem) soils. ¹⁵ A map extract from the Northern Rivers Farmland Project is contained within Diagram 7 below.



¹³ Cotter, M. M & Gardiner, J. E, A Patchwork of Meanings A Field Guide to the Heritage Landscapes of the Alstonville Plateau, 1999, page 1.

¹⁴ Planners North Pty Ltd, Big Scrub Conservation Strategy, 1987

¹⁵ Cotter S Geoheritage of the Alstonville Plateau in Cotter, M. M & Gardiner, J. E, A Patchwork of Meanings A Field Guide to the Heritage Landscapes of the Alstonville Plateau, 1999, page 5.

The Alstonville Plateau has an elevation which generally ranges between 120 and 180 metres above sea level (Australian Height Datum AHD). The highest point within Wollongbar Village is located on Lismore Road, near the intersection of Rifle Range Road, which has a height of approximately 174 metres (AHD) above sea level.

Wollongbar's mean annual minimum and maximum temperatures are within the range of 15°C to 23.5°C degrees. Mean annual rainfall is 1825.2mm with February and May being the months with highest long term average rainfalls. The climate can be described as sub-tropical being mild and generally frost free.

1.6 Aboriginal and European Occupation

Aboriginal people have occupied the North Coast of NSW for at least 45,000 years. 16

The Alstonville Plateau forms a part of the Bundjalung nation, the location of which is shown in Diagram 8 below.

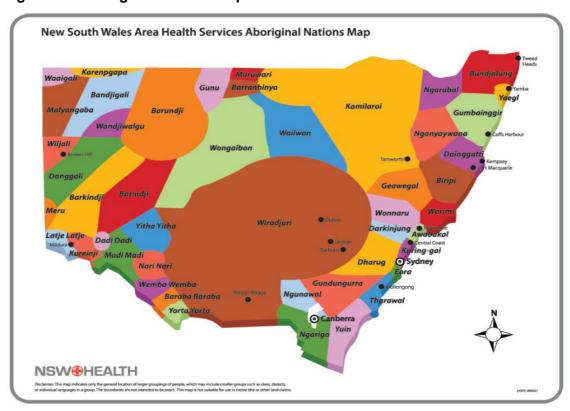
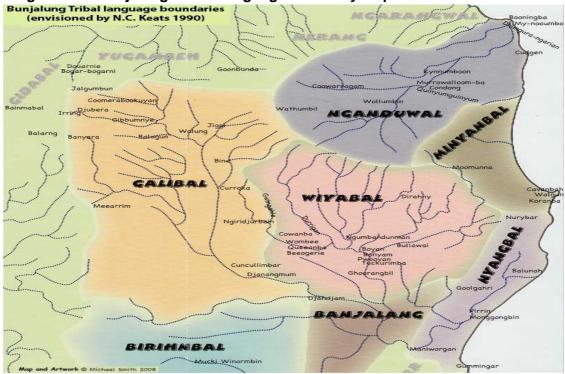


Diagram 8 - Aboriginal Nations Map

The Alstonville Plateau, according to Keats, is located within Nyangbal and Wiyabal tribal language areas the location of which are shown in Diagram 9 below.

¹⁶ Heron R & Walker B, Aboriginal Cultural Heritage Values on the North Coast and within the Upper Clarence see https://www.google.com.au/webhp?sourceid=chrome-instant&ion=1&espv=2&ie=UTF-8#q=bunjalung%20tribal%20language%20boundaries

Diagram 9 - Bundjalung Tribal Language Boundary Map¹⁷



European settlement commenced on the Alstonville Plateau in 1865 with the arrival of the Freeborn families. Andrew Freeborn selected the first portion of land, Portion 1, Parish of Tuckombil, County of Rous, located near Perrys Hill in 1865.

1.7 Origin of Wollongbar

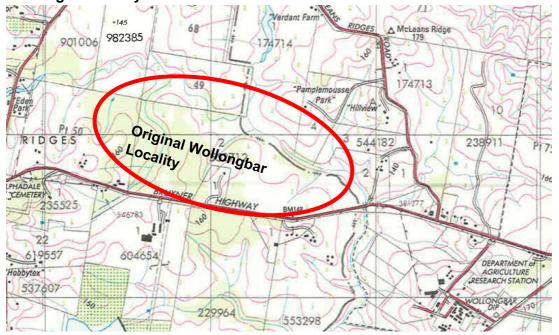
In 1870 William Henry Smith selected 150 acres on the northern side of the Lismore and Ballina Road. The property was located west of Marom Creek according to le Bas and Sloan. Today it would be located in that part of the Macleans Ridges locality, located within the City of Lismore, generally as indicated within the area shown by red outline in Diagram 10 below.

¹⁷ Sourced from Arakwal People of Byron Bay web site http://arakwal.com.au/

¹⁸ Wollongbar Plateau Historical Society Wollongbar Historic Village, 2010, page 13

¹⁹ Wollongbar Plateau Historical Society *Milestones and Memories*, 2007, page 112

Diagram 10 – Extract from 1986 CMA topographic map indicating general original Wollongbar locality



Extract from CMA Topographic Map 1:25,000, Lismore 9540-2-N dated 1986

Smith's property was named 'Wollongbar' which is referenced as meaning *place of holes*²⁰. (Also refer to the discussion on page 5 relating to Jack Kibbeen (Kappean), King of Wollongbar, for the origins of the term 'Wollongbar').

In 1876 a post office was located on Smith's property and by 1899 the post office had been moved further east to John Secombe's property and the area became known as 'Wollongbar'²¹.

The first school was opened in Wollongbar on 9 July 1900 on John Secombe's property. Its location is shown on the parish map extract contained in Diagram 11 below. The school was relocated to its present site, within the village of Wollongbar, in December 1988 due to the growth in enrolments and more traffic on the Bruxner Highway.²²

²⁰ Wollongbar Plateau Historical Society Wollongbar Historic Village, 2010, page 13

²¹ Wollongbar Plateau Historical Society *Milestones and Memories*, 2007, page 114

²² Wollongbar Plateau Historical Society *Milestones and Memories*, 2007, page 158

Diagram 11 – Extract from the Tuckombil Parish Map (28 March 1938)



(William Smith's 150 acre property 'Wollongbar' was located west of Marom Creek on the northern side of the highway.)

1.8 Heritage – the Built and Natural Environment

According to Gardiner and Knox, few buildings and structures on the Alstonville Plateau are older than 100 years. This they attributed to the original buildings being constructed of timber which is particularly susceptible to fire and decay²³.

Ballina Local Environmental Plan 1987

Ballina Local Environmental Plan 1987 (BLEP 1987) no longer applies to the residential areas which comprise Wollongbar, having been replaced by Ballina Local Environmental Plan 2012 (BLEP 2012). It still applies to the rural 'buffer' areas which were deferred from BLEP 2012.

BLEP 1987 listed 2 items of built environmental heritage located in Wollongbar as detailed in Table 2 below:

Table 2 - Ballina LEP 1987 Listed Wollongbar Environmental Heritage Items

Name	Location	
Group of 4 houses	Bruxner Highway, Wollongbar, adjoining	
	research station, Wollongbar	
Dwelling house known as Laurel	Proposed Lot 1 in a plan of subdivision of Lot	
Hill	1, DP 305806, Smiths Lane, Wollongbar	

Ballina Local Environmental Plan 2012 (BLEP 2012)

Following the completion of the Ballina Shire Community Based Heritage Study in 2008, a number of additional items, with local heritage value to Wollongbar, were identified.

The items identified are listed in Table 3 below together with the Ballina Shire Community Based Heritage Study's recommended action.

²³ Gardiner J & Knox S Heritage Assessment of the Alstonville Plateau, 1996

Only Laurel Hill, located at 32 Smiths Lane, Wollongbar, is listed as an item of Ballina Shire's environmental heritage in BLEP 2012. This is because the listing process, adopted by the Council, was a voluntary one which required the overt agreement of the land owner.

Where agreement has not been reached the Council has traditionally not pursued the incorporation of specific items. An ongoing challenge for Council relates to the advocating of the benefits associated with listing items that have heritage significance within the LEP.

Table 3 – Items of Wollongbar's Environmental Heritage referenced in the Ballina Shire Community Based Heritage Study in 2008

Name	Location	Heritage Study Recommended Action
Blair Athol (1908)	Smith's Lane, Wollongbar	To be listed on BSC LEP as an item of environmental heritage
Bonnie Doon	Bruxner Highway, Wollongbar	To be listed on BSC LEP as an item of environmental heritage
Killarney (1900)	Bruxner Highway, Wollongbar	To be listed on BSC LEP as an item of environmental heritage
Laurel Hill – Federation House	32 Smiths Lane, Wollongbar	To be listed on BSC LEP as an item of environmental heritage
Myholme (1915)	303 Bruxner Highway (Lismore Road) Wollongbar	To be listed on BSC LEP as an item of environmental heritage
Russelton (1890)	103 Bruxner Highway, Wollongbar	To be listed on BSC LEP as an item of environmental heritage
Spring Hill Butter Factory site	Spring Hill Butter Factory site, Wollongbar	Further investigation of the potential archaeological values associated with this site to be undertaken.
Norfolk Island pines	Bruxner Highway, Alstonville & Wollongbar	To be listed on BSC LEP as an item of environmental heritage
Wollongbar Public School – school room	Simpson Avenue, Wollongbar	To be listed on BSC LEP as an item of environmental heritage
Manager's cottage	Wollongbar Experimental Farm (1890s)	To be listed on BSC LEP as an item of environmental heritage

Ballina Shire Development Control Plan 2012 (BSDCP 2012)

BSDCP 2012 Chapter 3 – Urban Subdivision contains specific requirements relating to subdivision within the Wollongbar Urban Expansion Area (WUAE). Part 5.3 of Chapter 3 contains the planning objectives for the WUAE which include providing a mix of low to medium density housing forms within this area. In terms of density controls, land with slope less than or equal to 20% is specified as achieving a density of 12 – 15 dwellings per hectare with smaller residential lots. Land with slope greater than 20% is specified as achieving a residential density of 8 – 10 dwellings with larger lots.

BSDCP 2012 Chapter 4 – Residential and Tourist Development contains specific requirements for residential and tourist development within the WUEA which recognises the higher land slip susceptibility of development within part of this area.

BSDCP 2012 does not contain specific provisions relating to commercial development within Wollongbar. Commercial development is permitted within the B1 Neighbourhood

Centre zone located within Wollongbar Village. The land zoning plan for Wollongbar Village is shown within Diagram 6.

BSDCP 2012 *Chapter 6 – Commercial Development* provides a framework under which development proposals, which require Council's development consent, must be considered. The planning objectives of Chapter 6 places emphasis on:

- Encourage well-designed business and commercial development;
- Manage the bulk, scale and traffic generation of business and commercial development;
- Encourage buildings which respond to the shire's sub-tropical climate; and
- Provide general development controls that are consistent with and complementary to precinct specific controls. (p. 4 BSDCP 2012)

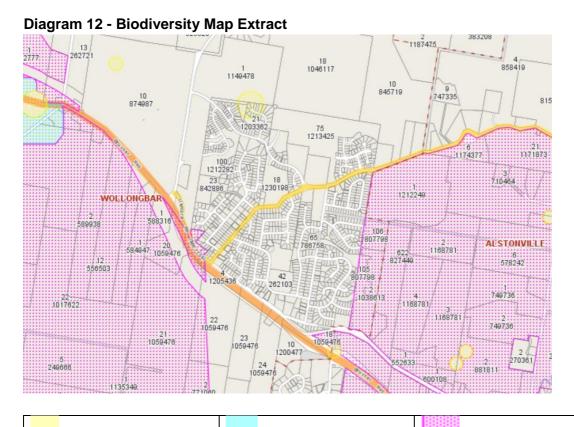
Chapter 2 – Environmental Characteristics of Wollongbar

The urban areas of Wollongbar are surrounded by land assessed as having primarily Local Biodiversity Significance in mapping undertaken by the previous NSW Department of Environment Climate Change and Water (DECCW).

Areas designated as being of Local significance in DECCW's Biodiversity Conservation Lands (BCL) dataset incorporate those areas zoned for environmental protection purposes. The 7(i) Environmental Protection (Urban Buffer) zoning of the land, under the provisions of Ballina LEP 1987, is considered to be the reason for this land being assigned a Local Significance value.²⁴

Located within these locally significant areas are biodiversity hotspots assigned Regional and State biodiversity significance. These areas primarily contain Big Scrub subtropical rainforest remnants. The Big Scrub was a rich area for flora with a high level of species endemism of which less than 1% remains.²⁵

An extract of the Biodiversity Map for Wollongbar is contained in Diagram 12 below.



During May 2018 consultants with specialist skills in landscape architecture, ecology and arboriculture will be assessing trees within Wollongbar's urban area for their potential to be included within a shire wide Register of Significant Trees. This process

State significance

Regional significance

Local significance

²⁴ Refer dataset identification criteria in DECC (NSW) 2008 Targeted Vegetation Survey of Floodplains and Lower Slopes on The Far North Coast

²⁵ DECC (NSW) 2008 Targeted Vegetation Survey of Floodplains and Lower Slopes on The Far North Coast, P6

may result in some trees at Wollongbar being nominated for inclusion within the register. Once a tree is included, special factors will need to be considered before the tree is removed or pruned.

2.1 Australian Heritage Database

The broader Alstonville and Wollongbar localities contain many more areas with significant biodiversity value. These items are listed within the Australian Heritage Database, maintained by the Federal Department of Environment and Energy. The database lists 13 items (September 2016) considered to be "Big Scrub" rainforest remnants having a total area of approximately 387 hectares.

Natural areas listed within the Australian Heritage Database and located within the Alstonville and Wollongbar broader locality are detailed in Table 4.

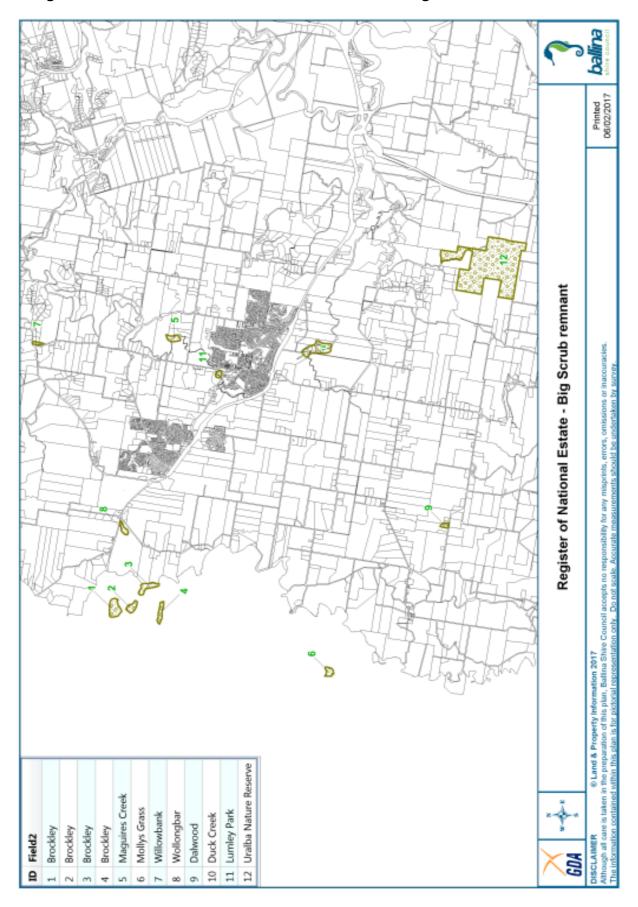
Table 4 - Extract from Australian Heritage Database (accessed 26/9/2016)

26/9/2016)		
Site	Locality	Listing Category
Identification		
Brockley Scrub No	Wollongbar,	(<u>Interim List</u>)
1 Bruxner Hwy	NSW, Australia	Register of the
		National Estate
About 15 ha, 3 km		(Non-statutory
west-north-west of		archive)
Wollongbar.		
Brockley Scrub No	Wollongbar,	(<u>Interim List</u>)
2 Bruxner Hwy	NSW, Australia	Register of the
About Obo OF lun		National Estate
About 8 ha, 2.5 km		(Non-statutory
west of Wollongbar.		archive)
Brockley Scrub No	Wollongbar,	(Interim List)
3 Bruxner Hwy	NSW, Australia	Register of the
<u>5</u> Braxiler riwy	NOW, Adstralia	National Estate
About 6 ha, 3 km		(Non-statutory
west of Wollongbar.		archive)
Dalwood	Alstonville, NSW,	(Interim List)
Scrub Tregeagle -	Australia	Register of the
Meerschaum Vale	1.000.000	National Estate
Rd		(Non-statutory
		archive)
About 1.25 ha, 6.5		,
km south-west of		
Alstonville,		
comprising Council		
Reserve Lot 11		
DP248855.		
Duck Creek Scrub	Alstonville, NSW,	(<u>Registered</u>)
	Australia	Register of the
About 30 ha, 1.5km		National Estate
south-south-east of Alstonville.		(Non-statutory
AISTORVIIIE.		archive)
Duck Creek Scrub	Alstonville, NSW,	(Registered)
Extended Area	Australia	Register of the
About 4 ha, 1.5 km	Additalia	National Estate
south south east of		(Non-statutory
Alstonville.		archive)
Lumley Park	Alstonville, NSW,	(Interim List)
Scrub Bugden Ave	Australia	Register of the
Duguen Ave	Australia	Negister of the

Site Identification	Locality	Listing Category
About 2.5ha, in Alstonville.		National Estate (Non-statutory archive)
Maguires Creek Scrub Johnstons Rd About 6 ha, 1.5 km north of Alstonville.	Alstonville, NSW, Australia	(Interim List) Register of the National Estate (Non-statutory archive)
Mollys Grass Scrub Mollys Grass Rd About 4.5 ha, 6 km south-west of Wollongbar.	Wollongbar, NSW, Australia	(Interim List) Register of the National Estate (Non-statutory archive)
Uralba Nature Reserve Forest Rd About 288 ha, 5 km south-east of Alstonville and 6 km north of Wardell.	Alstonville, NSW, Australia	(Registered) Register of the National Estate (Non-statutory archive)
Uralba Scrub Forest Rd About 305 ha in three parcels, 5 km south-east of Alstonville and 6 km north of Wardell.	Alstonville, NSW, Australia	(Interim List) Register of the National Estate (Non-statutory archive)
Willowbank Scrub Pearces Creek Rd About 1.5 ha, 4 km north of Alstonville.	Alstonville, NSW, Australia	(Interim List) Register of the National Estate (Non-statutory archive)
Wollongbar Scrub Bruxner Hwy About 3.5 ha, 1.5 km north-west of Wollongbar.	Wollongbar, NSW, Australia	(Interim List) Register of the National Estate (Non-statutory archive)

Diagram 13 shows the location of natural areas listed within the Australian Heritage Database. These areas are of significant value to the localities of Alstonville and Wollongbar and the broader Ballina Shire.

Diagram 13 – Natural Areas listed in the Australian Heritage Database



2.2 NSW Wildlife Atlas

A desktop assessment was undertaken in November 2016 utilising the NSW Office of Environment and Heritage's *Wildlife Atlas* to determine the presence of Threatened, Vulnerable or Endangered species, communities or populations within the Wollongbar - Alstonville localities.

The search was undertaken within a 10km by 10km area which incorporated Wollongbar and its surrounds [Reference Co-Ordinates -28.77 North, 153.34 West, 153.51 East and -28.88 South].

The Wildlife Atlas data base searches are detailed in the sections below. Annexure 2 contains details of the Threatened species and the number of records found within the broader Alstonville – Wollongbar localities.

2.2.1 Fauna

The search found 310 records of 46 species of Threatened listed animal species within the search area. These species are listed in either the NSW State *Biodiversity Conservation Act 2016* (BC Act 2016) or the Federal *Environment Protection and Biodiversity Conservation Act* (EPBC Act 1999). The top five recorded animal species appear in Table 5 below (3 birds and 2 mammals).

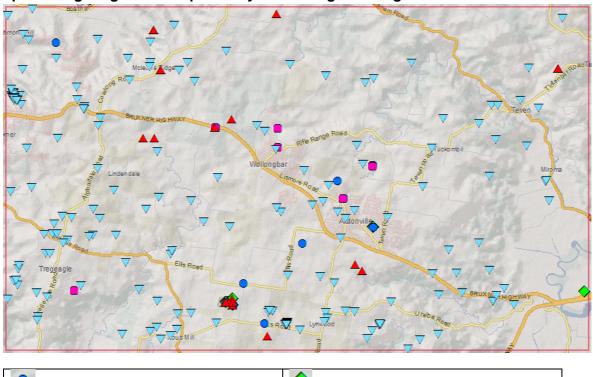
Table 5 - Top 5 Recorded Animal Threatened Species in Alstonville - Wollongbar Locality

Species	Status (NSW TSC Act 1995)	Number of Records
Koala (Phascolarctos cinereus)	Vulnerable	207
Rose-crowned Fruit-Dove (Ptilinopus regina)	Vulnerable	24
Grey-headed Flying-fox (Pteropus poliocephalus)	Vulnerable	21
Spotted Harrier (Circus assimilis)	Vulnerable	11
White-bellied Sea-Eagle (Hieraaetus leucogaster)	Vulnerable	8

The map contained within Diagram 14 has been extracted from the NSW Wildlife Atlas. The map shows graphically the location of the recorded sites of the five animal species contained within Table 5 above in close proximity to the Wollongbar Village.

Alstonville – Wollongbar is also the northern boundary of a nationally significant koala population (Ballina Koala Habitat Study 2015).

Diagram 14 - Extract from NSW Wildlife Atlas showing location of selected animal species sightings in close proximity to Wollongbar Village



Spotted Harrier	♦ White-bellied Sea- Eagle
Grey-headed Flying-	V Koala
Rose-crowned Fruit-Dove	

2.2.2 Flora

The search found 127 records of 23 species of Threatened listed plant species in the search area. These species are listed in either the NSW State *Biodiversity Conservation Act 2016* (BC Act 2016) or the Federal *Environment Protection and Biodiversity Conservation Act* (EPBC Act 1999).

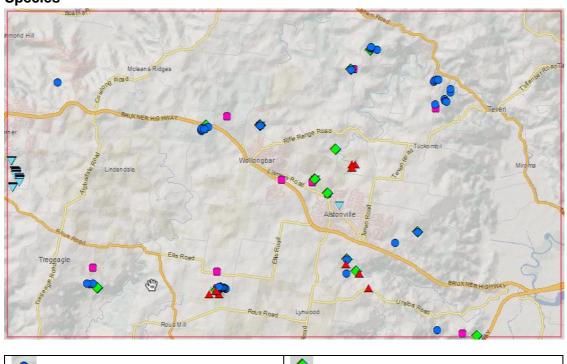
The top 5 recorded plant species are detailed in Table 6 below:

Table 6 – Top 5 Threatened Plant Species – Broader Alstonville – Wollongbar Locality

Plant Species	Status (NSW TSC Act 1995)	Number of Records	
Arrow –head Vine (Tinospora tinosporoides)	Vulnerable	51	
Hairy Jointgrass (Arthraxon hispidus)	Vulnerable	31	
Red Lilly Pilly (Syzygium hodgkinsoniae)	Vulnerable	21	
Rough-shelled Bush Nut (Macadamia tetraphylla) Rough- shelled Bush Nut	Vulnerable	13	
Southern Ochrosia (Ochrosia moorei)	Endangered	9	

The map contained within Diagram 15 has been extracted from the NSW Wildlife Atlas and shows graphically the location of the top 5 five plant species in closest proximity to Wollongbar Village.

Diagram 15 - Extract from NSW Wildlife Atlas Showing Location of Selected Plant Species



Arrow-head Vine	Red Lilly Pilly
Rough-shelled Bush Nut	▼ Hairy Jointgrass
Southern Ochrosia	

Chapter 3 – Demographic Characteristics

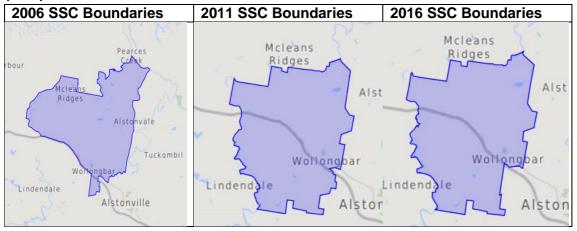
3.1 Geographical Boundaries of Wollongbar

For the purpose of the demographic analysis contained in Chapter 3, Australian Bureau of Statistics (ABS) State Suburb Place of Usual Residence (SSC) data, relating to the 2011 and 2016 census periods for Wollongbar, have been used.

Data from the 2006 census has not been used in the analysis due to a significant change in the census area boundaries as indicated in Diagram 16 below.

It is noted that the State Suburb (SSC) geographical boundaries for Wollongbar incorporate adjacent rural areas. These areas were not considered to be subject to significant demographic changes during the five year period 2011 to 2016. For the purpose of this analysis it has therefore been assumed that the demographic changes that have occurred relate mainly to the Wollongbar urban area.

Diagram 16 - Geographical Boundaries of Wollongbar – State Suburb Census (SSC) Data Area



3.2 Wollongbar Demographic Profile 2016

Table 7 presents a summary of key census data for 2016 and how this compares with 2011, as well as Ballina Shire, during these census periods. This is followed by commentary relating to the planning implications of some of this data and suggestions relating to how emerging issues may be considered through planning policy.

Table 7 – Key Demographic Comparison – Wollongbar and Ballina Shire

Characteristic	Wollongbar 2016 Ballina Shire ()	Wollongbar 2011 Ballina Shire ()
Population (Usual Resident)	2828 +18% (+6.4%)	2396
Population over 15	79.8% (83.3%)	84.8% (80.8%)
Elderly (85+)	1.8% (4.2%)	1.3% (3.6%)
Employed	90% (89.1)	89.4% (87.7%)
Number of Dwellings	1138	892
Additional Dwellings	246 +27.6% (+6%)	-
Dwelling Structure Separate House	83.2% (69.2%)	89.1% (71.1%)
Dwelling Structure Medium Density	16.2% (27.2%)	10.6% (25.6%)
Average People per Household	2.6 (2.3)	2.6 (2.4)
Housing Tenure – Owned outright	36.6% (41%)	38.5% (40.2%)
Housing Tenure – Mortgage	39.1% (26.5%)	37% (26.7%)
Housing Tenure – Renting	22.6% (28%)	22.3% (29.2%)
Household Type – Lone person	21.3% (28.3%)	19.7% (27.3%)
Household Type – Couples no children	40.4% (45.9%)	41.9% (44.9%)
Car Ownership – no car	1.9% (5.5%)	2.9% (7.5%)
Car Ownership – one car	30.7% (37.3%)	35.2% (39.2%)
Car Ownership – two cars	48.4% (38%)	40.2% (36.7%)
Car Ownership – three or more cars	16.6% (15.2%)	16.0% (13.61%)
Method of Travel to Work – car as driver	76% (68.5%)	72. % (65.1%)
Unemployed	6.3% (5.9%)	4.6% (6.3%)
Median Age	42 (48)	42 (45)
Median monthly Mortgage Payment	\$1,733 (\$1,733)	\$1,517 (\$1,733)
Median Rent	\$340 (\$340)	\$285 (\$290)
Median Weekly Household Income	\$1,280 (\$1,156)	\$1,126 (\$930)

3.3 Population Growth, Housing Supply and Household Size

From 2011 to 2016, Wollongbar's population increased by 432 people or approximately 18%. During this period the number of dwellings also increased by 246, or approximately 27.6%. Housing supply is therefore considered to be at a high level relative to population increase.

Given that housing supply has increased at a rate greater than population growth it could have been expected that the average number of people per household would have declined between 2011 and 2016. The average number of people per household has however remained steady at 2.6 persons during this 5 year period. This anomaly can be partly explained by a significant increase in unoccupied dwellings (59 in 2016 or 5.3% of total dwellings) compared to 2011 (13 or 1.5% of total dwellings). The factors responsible for this significant increase in unoccupied dwellings are not known.

3.4 What Changes Have Occurred in the Wollongbar – McLeans Ridges Age Structure Between 2011 and 2016?

The 2016 Census indicated that Wollongbar had a population of 2828 people (SSC place of usual residence data). This represents an increase of approximately 18% during the 5 years census period.

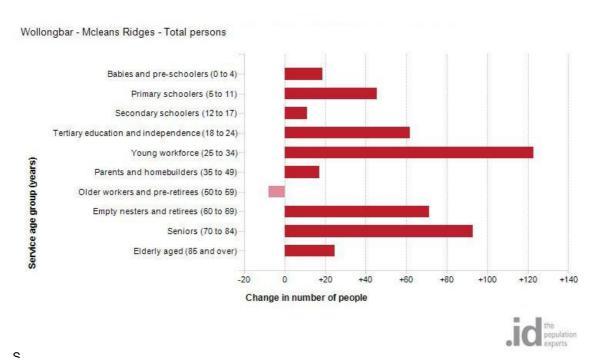
It has been assumed that the majority of the population increase between 2011 and 2016 resulted as a consequence of residential development that occurred within the Wollongbar urban area as opposed to the adjoining rural hinterland. A significant rural hinterland area forms a part of the Wollongbar State Suburb (SSC) Census boundaries utilised in 2011 and 2016.

Changes in Wollongbar's age structure, between 2011 and 2016, were in the following age groups:

- Babies and pre-schoolers (0 4) (+18 people)
- Primary schoolers (5 to 11) (+45 people)
- Secondary schoolers (12 to 17) (+11people)
- Tertiary education and independence (18 to 24) (+62 people)
- Young workforce (18 to 34) (+123 people)
- Parents and homebuilders (35 to 49) (+17)
- Older workers and pre-retirees (50 to 59) (-8 people)
- Empty nesters and retirees (60 to 69) (+71 people)
- Seniors (70 to 84) (+93 people)
- Elderly (85 and over) (+25)

The age structure changes are shown graphically in Diagram 17 below:

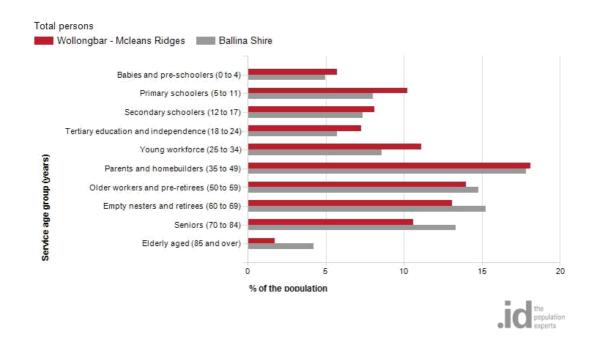
Diagram 17 - Change in Wollongbar Age Structure – Service Age Groups, 2011 – 2016



Source: 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.

Analysis of the Wollongbar 2016 service age groups, compared to Ballina Shire, shows that there was a higher proportion of people in the younger age groups (0 to 49 years) and a lower proportion of people in the older age groups (+50 years). ²⁶This information is shown graphically in Diagram 18 below.

Diagram 18 – Wollongbar and Ballina Shire Age Profile – Service Age Groups 2016



Source: 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

The differences in age profile between Wollongbar and Ballina Shire are considered to be attributable to younger families being attracted to new housing opportunities available in Wollongbar.

The younger Wollongbar age profile has implications for services such as child care and school enrolments as well as the provision of recreation and sporting facilities.

3.5 New Dwelling Commencements - Wollongbar

In the five year period, 2012-13 to 2016-17, 201 dwellings were commenced at Wollongbar, this being the third highest number of dwellings commenced by suburb within Ballina Shire as indicated in Table 9 below²⁷:

²⁶ 2011 Community Profile – Wollongbar – Mcleans Ridges, id.Consulting, p13

²⁷ Ballina Shire Council Land Monitor Report data

Table 9 - Ballina Shire Dwelling Commencement and Residential Lot Data 2012-13 to 2016-17

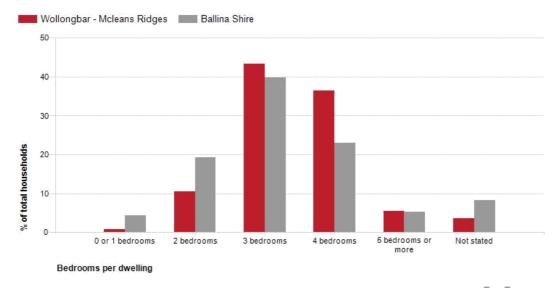
Suburb	Dwellings Commenced	Lots Approved (Approved at DA stage)	Lots Released (All Council requirements finalised)
Alstonville	38	24	22
Ballina	258	69	228
Cumbalum	161	315	136
Lennox Head	238	532	205
Skennars Head	41	2	15
Wollongbar	201	54	213
TOTAL	937	996	819

3.6 What Size Houses Are Being Built in Wollongbar?

Comparing 2011 and 2016 ABS census data for the change in the number of bedrooms per dwelling in Wollongbar indicates that more 3, 4 and 5 bedroom dwellings are being built and less 1 and 2 bedroom dwellings.

Diagrams 19 and 20 contain graphs which show the number of bedrooms contained within dwellings at Wollongbar and the changes that have occurred between 2011 and 2016.

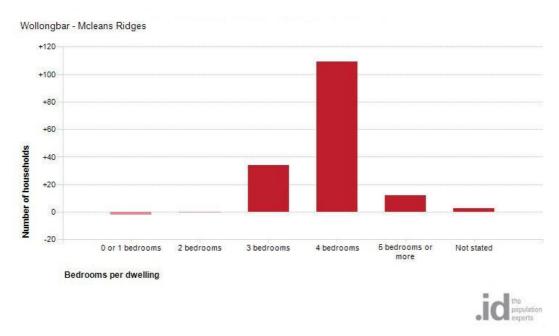
Diagram 19 - Number of Bedrooms per Dwelling 2016



• C population experts

Source: 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

Diagram 20 - Change in Bedrooms per Dwelling 2011 to 2016



Source: 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

The largest change in the number of bedrooms per dwelling in Wollongbar, in the period 2011 – 2016, was in the 4 bedroom category with an additional 109 dwellings.

The implications of the above are that new dwellings are becoming larger and there are fewer smaller dwellings being built. This then impacts housing choice and the ability for people to downsize within Wollongbar village. It may also indicate that new home builders in Wollongbar are attracted by the relatively larger lot sizes available in the WUEA which facilities the building of larger houses.

It is noted that in the period 1 April 2014 until 31 December 2017 there were only 6 approved secondary dwellings (maximum size of 60m² and containing 1 or 2 bedrooms) built in Wollongbar in response to Council's Secondary Dwellings Contribution and Charges Waiver Policy. The low take up rate for secondary dwellings in Wollongbar contributes to the overall low number of smaller dwellings in this location and limits housing choice for Wollongbar residents.

Table 10 provides details of the number of secondary dwellings approved within Ballina Shire by locality during the subject period.²⁸

Table 10 Secondary Dwellings Approved by Locality 1/4/2014 to 31/12/2017

Locality	Number of Secondary Dwellings Approved	
Alstonville	17	
Ballina	17	
East Ballina	14	
Cumbalum	5	
Lennox Head	48	
Skennars Head	4	
Wardell	3	
West Ballina	6	
Wollongbar	6	
Total	120	

3.7 What changes have occurred to dwelling types built in Wollongbar between 2011 and 2016?

In the 5 year period between 2011 and 2016 an additional 118 separate houses and 99 medium density units (assumed to be duplex dwellings) were built in Wollongbar.²⁹

The 2016 Census indicates that in terms of dwelling stock 83.2% of dwellings consist of separate houses and 16.2% of dwellings consist of medium density dwellings. This

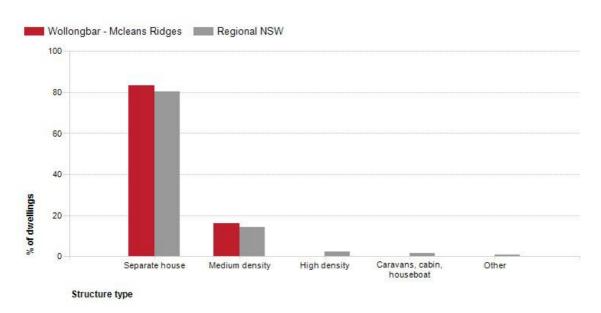
²⁸ Extract from report to Ballina Shire Council Ordinary Meeting on 22 February 2018

^{29 & 30} This is based on enumerated data prepared by .id consultants and contained within the 2011 Community Profile updated with 2016 Census data. p93

compares with Ballina Shire where 68.5% of dwellings consist of separate houses and 25.7% are classified as medium density dwellings. 30

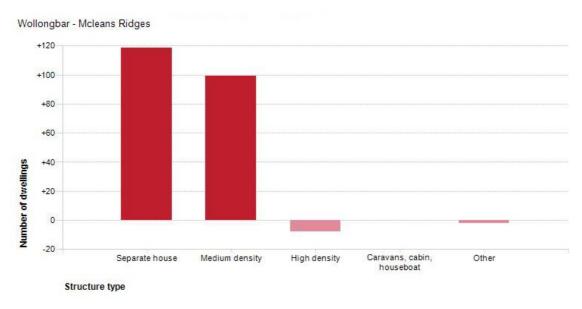
Diagrams 21 and 22 contain information relating to dwelling structure in 2016 and changes in dwelling structure in the period 2011 to 2016.

Diagram 21 - Dwelling Structure 2016



the population experts

Diagram 22 - Changes in Dwelling Structure 2011 to 2016





Source: 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

It is noted that the North Coast Regional Plan 2036 (NCRP 2036) encourages housing diversity by delivering at least 40% of new housing in the form of dual occupancies, apartments, townhouses, villas or dwellings on lots less than 400m² by 2036.³¹

In the period 2011 to 2016 approximately 46% of new dwellings built in Wollongbar were classified as medium density dwellings for Census purposes. Given that the majority of new dwellings were built in the WUEA it is considered that no further intervention mechanisms are required within this area to meet State Government housing diversity objectives.

In the established residential areas, outside of the WUEA, separate houses predominate, with more limited examples of dual occupancy or other medium density housing forms. One option available to Council, if it wished to encourage increased housing diversity in these areas, is to permit dual occupancy development on certain larger lots in a similar policy initiative as has been adopted for Alstonville.

3.8 Wollongbar Housing Tenure Changes 2011 to 2016

The number of persons who own their own homes without a mortgage in Wollongbar (36.6%) is below the Ballina Shire average of 38.9% (-2.3%). There has been little change in the percentage of people owning their own homes in Wollongbar between 2011 and 2016 (-0.2%).

The number of persons owning their own homes with a mortgage in Wollongbar (38.1%) has increased from 2011 to 2016 (+2.9%) and that rate of increase has been greater than the rate across Ballina Shire (+0.9%). This may be an indicator of younger families moving to Wollongbar and financing that move via mortgages.

The number of people renting in 2016 as a proportion of dwelling occupiers in percentage terms in Wollongbar (21.2%) has decreased from the 2011 level (-0.8%). Although in numeric terms an additional 22 persons were renting than in 2011 (232 compared to 210). This is less than the reduction in renters across Ballina Shire (-2.2%) and may be an indicator of a more stable housing market in Wollongbar.

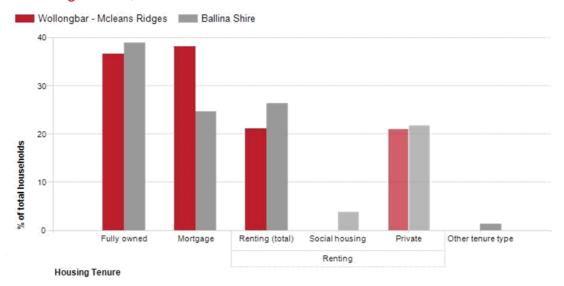
The percentage of people renting in Wollongbar in 2016 is significantly less (21.2%) than for Ballina Shire (26.4%).

Diagrams 23 and 24 contain housing tenure information for Wollongbar extracted from the the .id Community Profile utilising ABS enumerated data.

³¹ North Coast Regional Plan 2036 p 56

Diagram 23 - Wollongbar Housing Tenure 2016

Housing tenure, 2016



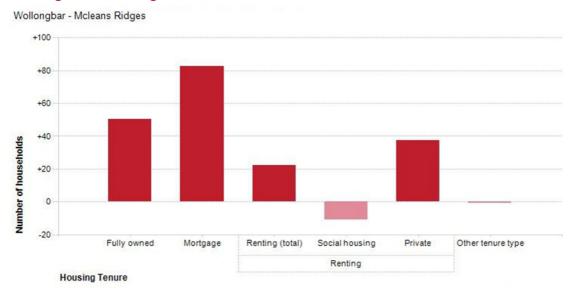
Source: Australian Bureau of Statistics, Census of Population and Housing, 2016 (Enumerated data) Compiled and presented in profile.id by .id, the population experts.



vv

Wollongbar Housing Tenure Changes 2011 - 2016

Change in housing tenure, 2011 to 2016



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



3.9 Retirement and Aged Care Accommodation in Wollongbar

In February 2018 there was no assisted or independent living aged care accommodation provided within the Wollongbar urban area. Assisted aged care is available in Alstonville through facilities provided by Baptist Care and Adventist Senior Living.

Residential zoned land is available within the WUEA which may be suitable for seniors living accommodation.

3.10 Place of Origin of New Housing Lot Buyers in Wollongbar

To determine whether new housing lots at Wollongbar met a local demand for housing lots, as opposed to satisfying a broader regional demand, the residential addresses of new lot buyers in the Mt Moriah and Kurrabri subdivisions were examined. Diagram 25 below shows graphically the local government areas (LGA) in which new home buyers resided prior to purchasing land at Wollongbar.

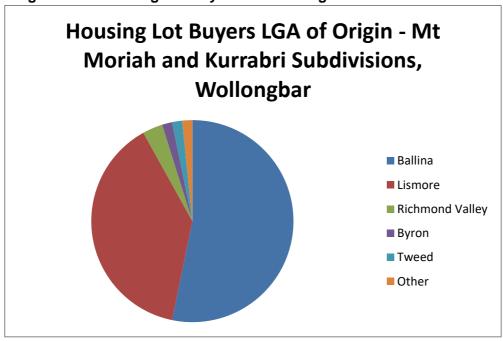


Diagram 25 - Housing Lot Buyers LGA of Origin

The data indicates that more than half the new lot buyers emanated from within Ballina Shire with the majority of the remaining buyers coming from the adjoining Lismore City LGA. It was also noted that a significant number of new land buyers emanated from Goonellabah.

The land buyer place of origin data may suggest that many newer residents of Wollongbar may already have established social networks outside the village area. This factor, combined with the higher multiple car ownership rates (65% of households own more than 1 car compared to 53% for Ballina Shire households) may indicate that new residents have the capacity to better maintain existing social networks.

3.11 Median Dwelling Sale Price in Wollongbar April 2017 to April 2018

Homes in Wollongbar have recorded a marginally higher median sale price compared to Alstonville. This is considered to be attributed to the larger number of new homes built in Wollongbar since 2013. Table 11 provides information relating to the movement in median house prices for the 12 month period April 2017 to April 2018 for various Ballina Shire localities.

The difference between median sale price for detached dwellings in Wollongbar and Alstonville has been reducing over the past 12 months (Wollongbar median house prices were 8% higher in the period July 2016 to July 2017 and are now approx +2% higher). This is a surprising result given the newer housing stock in Wollongbar and

may be a reflection of the demand for older dwellings on comparative large flat lots at Alstonville. It could also indicate that newer housing in Wollongbar may represent better value compared to old housing stock at Alstonville.

Table 11 - Median House Price Movements April 2017 to April 2018³²

Locality	Median Sale Price	12 month % Change
Wardell	\$420,000	12.0%
Alstonville	\$562,500	15.68%
Ballina	\$545,000	14.14%
West Ballina	\$600,000	11.94%
Wollongbar	\$572,500	14.50%
East Ballina	\$698,000	3.41%
Lennox Head	\$886,500	12.57%
Skennars Head	\$915,000	21.59%
Cumbalum	\$620,000	-2.52%

3.12 Public School Enrolments 2006 to 2016



An analysis of NSW Government school February enrolment data relating to Wollongbar Public School, for the period 2006 to 2016, has been undertaken. Table 12 contains enrolment data for the 2006 to 2016 periods.

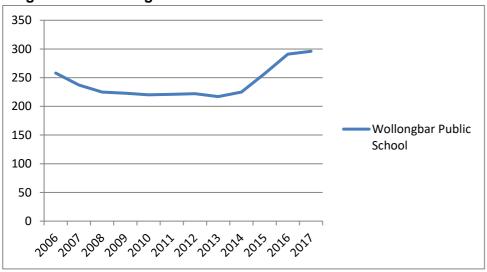
³² Corelogic Data taken from http://www.yourinvestmentpropertymag.com.au/top-suburbs/nsw

Table 12 - Wollongbar Public School Enrolment Data 2006 to 2017

Year	Wollongbar Public School Enrolment	Year	Wollongbar Public School Enrolment
2006	258	2013	217
2007	237	2014	225
2008	225	2015	257
2009	223	2016	291
2010	220	2017	296
2011	221		
2012	222		

The data contained within Table 12 is presented graphically in Diagram 26 below.

Diagram 26 - Wollongbar Public School Enrolment Data 2012 - 2017



The above data indicates that during the period 2006 to 2017, enrolments in Wollongbar Public School have increased by 14.72%.

In the period 2011 to 2016 which corresponds with census periods, enrolments in Wollongbar Public School increased from 221 to 296 students (+33.91%). Comparing school enrolments with census data for this period, for the 5 to 14 year age cohort, indicates that the number of children increased by 43 children (+11.8%).

It is also noted that the number of children in the 0 to 4 year age cohort has increased by 20 children (13.88%) in the period 2011 to 2016. This indicates that enrolments within the Wollongbar Public School can be expected to continue to increase on an annual basis.

3.13 Wollongbar TAFE Enrolments 2006 to 2017

Wollongbar TAFE is located at 61 Sneaths Road, Wollongbar. This TAFE specialises in agriculture, horticulture, fashion and information technology courses. Other vocational areas available at the campus include automotive, plumbing, children's services, and community services.

Data available from the Wollongbar TAFE web site³³ in September 2017 indicated that there were over 2700 students enrolled and over 100 staff associated with this campus.

Enrolment data relating to specific TAFE campuses appears to be no longer publically published. In the period 2005 to 2007 published data³⁴ indicates that Wollongbar TAFE enrolments declined from 5,599 to 4,574 students. It would therefore appear that there has been a significant reduction in student numbers associated with Wollongbar TAFE over the past 10 year period.

Without the benefit of detailed discussions with TAFE management the implications of declining enrolments for the future of the Wollongbar campus are unknown.

During April and May 2017 the Wollongbar TAFE site was used as a staging post and SES Headquarters to manage the cleanup associated with flooding in the Lismore local government area in the aftermath of cyclone Debbie. The location of the TAFE site on flood free land, midway between Ballina and Lismore, proved an ideal site from which to respond to the devastation of flooding particularly in the Lismore CBD.

Photo 1 – Wollongbar TAFE oval showing tents used to accommodate emergency services crews in May 2017



³³ See http://www.northcoasttafe.edu.au/campuses/wollongbar.aspx?gclid=Clylw5_lgtYCFVMFKgodt6UK4g

³⁴ See TAFE NSW Statistics Newsletter 2005 -2007, TAFE Statistics Unit pp 5 - 8

Photo 2 – Wollongbar TAFE carpark used as a parking area for emergency service vehicles May 2017



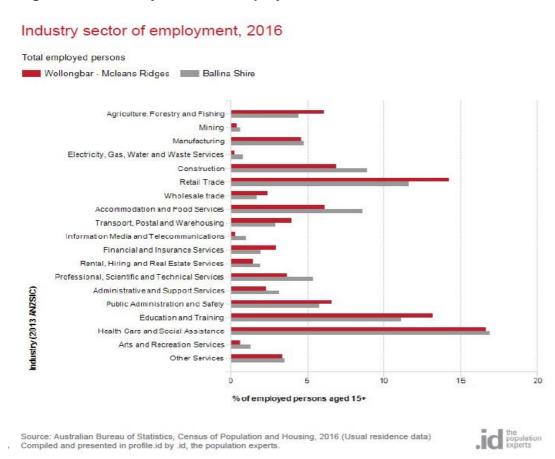
3.14 Wollongbar Employment Industry Sectors Changes 2011 to 2016 – Planning Implications

In 2016 6.3% of Wollongbar's labour force was unemployed. This compares with the Ballina Shire average unemployment rate of 5.9%.

Comparing unemployment data for Wollongbar in 2016³⁵ (6.3% or 89 people) and 2011 (4.6% or 53 people) indicates that there are an additional 36 people unemployed between these two periods. This may in part relate to the additional people that have moved into the village during this period (432) some of whom may have been unemployed.

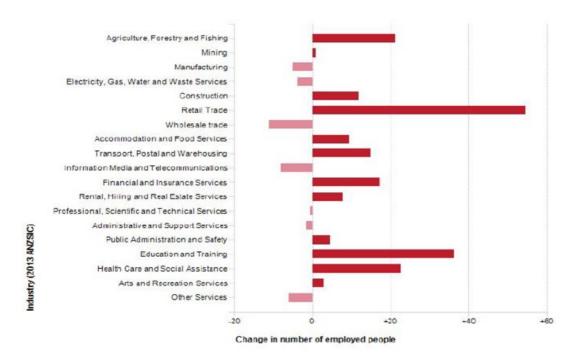
The major industry categories in which Wollongbar residents were employed in 2016 are shown in Diagram 27 and changes to industry sectors providing employment in the period 2011–2016 are shown in Diagram 28.

Diagram 27 - Industry Sector of Employment 2016



³⁵ ABS Wollongbar SSC Quick Stats data

Diagram 28 - Change in Industry Sector of Employment - 2011 to 2016



Source: 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.



The 2016 Census data indicates that there has been an increase in the number of people unemployed (+36) in Wollongbar between 2011 and 2016. Manufacturing, wholesale trade, and information media and telecommunications are the dominant groups employing less people whereas the agriculture, forestry and fishing; construction; retail trade; and education and training are the industry groups which are employing significantly more people.

In 2016 the Wollongbar community appears to have had good access to employment opportunities. These opportunities were contained across a broad range of industry types from agriculture and construction to retail and 'white collar' industries such as education and training.

Chapter 4 – Residential Growth Potential to 2038

4.1 What Dwelling Densities Are Being Achieved in the WUEA?

The Ballina Shire Growth Management Strategy requires future residential release areas to achieve a density target (gross neighbourhood dwelling density) of 15 dwellings per hectare and to provide a greater diversity of housing mix in these areas. This would see an increase in densities compared with existing established residential areas of approximately 5 dwellings per hectare³⁶.

An analysis of achieved gross residential densities (based on lot yield) within some new WUEA subdivisions has found lot yields in the range of 6 to 14 lots per hectare on residential zoned land. Council's subdivision in Tectona Place achieved a gross lot / dwelling density of approximately 11 lots per hectare and in Scarlett Court achieved 7 lots per hectare.

In August 2017 there existed 223 subdivided lots within the WUEA.

The 2008 Wollongbar Urban Expansion Area Infrastructure Strategy estimated that the 79 hectares of residential land contained within the WUEA would yield 928 new dwellings. This would represent a residential density of 11.75 dwellings per hectare.

The WUEA covers an area of 104.8ha when those areas subject to a 7(d) Environmental Protection (Scenic/Escarpment) Zone under the provisions of Ballina LEP 1987 are included. The gross residential density planned to be achieved if this land was also incorporated within the density calculation was approximately 8.85 dwellings per hectare.

4.2 United Protestant Association of NSW (UPA) WUEA Landholding

It is of interest that the largest land owner within the WUEA is the United Protestant Association of NSW (UPA). The UPA are the owners of 46 Sneaths Road, Wollongbar which has an area of 36.83ha of which approximately 32 hectares is zoned residential.

The residential component of the UPA landholding represents approximately 50% of the unsubdivided residential land at Wollongbar and has the potential to yield approximately 370 dwellings (11.75 dwellings per hectare).

Discussions held with M/s Whenua Morton in February 2018, UPA Regional Manager, have revealed that the UPA intends to undertake a strategic exercise for its Wollongbar land holdings later during 2018. Whilst conventional residential lots have not yet been ruled out it was advised that the focus would be on utilising UPA land for a variety of housing uses such as aged care, independent seniors living accommodation and various community and social housing options.

Assuming that the UPA land will not become available for conventional greenfield residential subdivision purposes this then will create a significant shortage of potential future greenfield residential lots within the WUEA. The issue of how this potential shortfall can be addressed is discussed further in Chapter 7.

³⁶ Ballina Shire Growth Management Strategy p 16

4.3 Remaining Dwelling (Lot) Capacity Within the WUEA

In December 2017 it was estimated that the WUEA contained approximately 61.5 hectares³⁷ of unsubdivided zoned residential land and 50 vacant subdivided residential lots.

The WUEA unsubdivided residential zoned land as at December 2017 (included land in the process of being subdivided in the Avalon estate and adjacent Ballina Shire Council land) has the potential to yield approximately 720 dwellings. This yield is based on the 11.75 dwellings per hectares estimate contained in the 2008 Wollongbar Urban Expansion Area Infrastructure Strategy.

In the event that all of he UPA land is developed for purposes more aligned to aged care and community housing then the number of potential conventional dwellings (lots) reduces to approximately 350.

4.4 Remaining Dwelling (Lot) Capacity Within Non-WUEA Wollongbar Urban Areas

In December 2017 the established Wollongbar residential areas contained 12 vacant subdivided residential lots. In addition to these lots the following large residential lots with subdivision potential existed as detailed in Table 13 below.

Table 13 - Dwelling Capacity Estimate non WUEA Residential Land

Site	Zoning	Area	Dwelling Potential
Lot 1 Bletchingly	R2 Low Density	1.0970ha	+12
Street	Residential		
76 – 86 Rifle	R3 Medium Density	2.023ha	+66 (1 per 300m2
Range Road	Residential		density)
Total			78 dwellings

4.5 Total Estimated Potential and Vacant Residential Lots (Dwellings) in Wollongbar

Table 14 below contains an estimate of the number of lots (dwellings) achievable within Wollongbar based on existing planning controls.

Table 14 – Wollongbar Additional Lot (Dwelling) Potential (December 2017)

Category	Number Dwellings (Lots)	Population Estimate ³⁸
Subdivided vacant residential lots within WUEA	50	130
Potential residential lots within unsubdivided WUEA land	720	1872
Subdivided vacant residential lots within non WUEA land	12	31
Lot (dwelling) potential on large unsubdivided non WUEA residential land	78	203
Sub -total	860 lots	2236 people
Less potential greenfield lots within UPA land	-370	-407 ³⁹
TOTAL	490 lots	1829 people

³⁷ This figure based on 79ha of zoned residential land within the WUEA less 17.5ha of developed residential zoned land.

³⁸ Based on 2.6 persons per household

³⁹ Population estimate is based on the difference between persons per household in conventional lots (2.6) and persons per household in seniors accommodation (1.5) for estimated potential of 370 lots / dwellings.

4.6 Population Change 1971 – 2036; Planning Implications

Table 15 provides details of the number of people living in Wollongbar in previous census periods (place of usual residence) as well as projections made by Forecast.id (estimated residents) for the period 2016 and 2036.

Table 15 - Wollongbar Population Details and Projection to 2038⁴⁰

Year	Population	Change
1971	120	14 fold increase in
1981	470	population in the 25 year
1986	710	period between 1971 and
1991	1268	1996
1996	1858	
2001	2297	WUEA established in 2002
2006	2446	+7.49% in 10 year period
2011	2469	
2016	2828	+68% projected population
2021	3387	increase from 2016 to
2026	3877	2036.
2031	4321	+14.5% population
2036	4759	increase from 2011 to
		2016.
		+2.65% Estimated
		average annual rate of
		population increase
		between 2016 and 2036.
2038	5014	+2.65% per
		annum extrapolated
		for an additional 2 year
		period beyond the 2036 forecast.id estimate
		given the 20 year life
		cycle of this study.

The population forecast for 2036 is largely based on the development of additional dwellings within the Wollongbar Urban Expansion Area (WUEA). The average annual rate of growth for Wollongbar has been calculated as +2.65% for the period 2016 to 2036 based on current (2018) policy settings.

A summary of key issues impacting on current and future population levels is detailed below:

- 2016 Census population 2828 for Wollongbar (SSC Usual Resident)
- 223 of potential 928 dwellings / lots within the WUEA developed (24.0%) by December 2017.
- 17.5ha of 79ha zoned residential land developed within the WUEA by December 2017 (22%).
- 32ha United Protestant Association (UPA) owned residential zoned land within WUEA has potential for 370 greenfield dwellings / lots.
- Potential for 720 dwellings / lots within WUEA as at December 2017 reduces to 350 greenfield dwellings / lots if UPA land excluded.

 $^{^{\}rm 40}$ Population forecasts for period 2021 to 2036 provided by forecast.id Wollongbar – McLeans Ridges Population and Housing Forecasts 2011 – 2036 page 8

- Estimated 860 conventional lot potential (existing vacant and potential new lots) within existing zoned residential area (incorporates UPA land). Population increase potential 2236 people.
- Estimated 490 conventional lot potential (existing vacant and potential new lots)
 within existing zoned residential area if UPA land not developed for greenfield
 subdivision purposes. Estimated population increase potential of 1829 people
 (includes an estimate of 407 people for the UPA owned land if developed for
 seniors and community housing purposes).
- Shortfall of 370 greenfield lots if UPA land developed for seniors and community housing purposes.

Chapter 7 provides an analysis of a number of policy options to address the potential shortfall of greenfield lots assuming the UPA land is developed for non-greenfield housing purposes.

Chapter 5 – Wollongbar's Future **Vision**

5.1 Pre Study Community Engagement – What did we do?

During April and May 2017 initial consultation with the Wollongbar community was undertaken to inform the preparation of the draft Wollongbar Planning and Environmental Study and draft Strategic Plan 2038. During this period Wollongbar residents and property owners were engaged through the following activities:

- Face to face interviews conducted at the Wollongbar Shopping Centre. A total of 43 people were interviewed ranging in age from 10 years to 96 years.
- Door knocking of properties within the Kurrabri Estate (Plateau Drive and Callicoma Court) located within the Wollongbar Urban Expansion Area (WUEA) on Saturday 22 April 2017. A total of 16 property occupants (owners and renters) were interviewed representing people that lived in 14 properties.
- Door knocking of properties located on Lismore Road, Campbell Avenue, Francis Avenue and Simpson Avenue, Wollongbar on Saturday 29 April 2017. A total of 15 property occupants (owners and renters) were interviewed representing people that lived in 12 properties.
- Letters forwarded to 123 property owners in the Russellton Industrial Estate seeking feedback via an on-line survey.
- Letters forwarded to 13 owners of commercial properties, and large undeveloped lots within the Wollongbar urban area, seeking feedback on their future property development plans.
- Flyer letter box drop on 23 and 24 May 2017 to all residential properties (approx. 1000) in Wollongbar inviting participation in the on-line survey.



During the consultation period residents were encouraged to complete an on-line survey. The survey was designed to provide feedback on why people live in Wollongbar, and the issues impacting on this community as well as future aspirations. A separate on-line survey was created for owners of industrial land within the Russellton industrial estate.

The surveys were made available electronically via a link from Council's website. A limited number of hard copy surveys were also provided to residents which were later entered manually by Council staff into the *survey monkey* website. The surveys were closed on 2 June 2017 at which time 65 responses to the residents' survey had been received. This represents responses from approximately 3% of Wollongbar village residents.

Only 2 industrial surveys were completed. This small number was considered insufficient to warrant further analysis of the survey comments.

Annexure 3 to this study contains a copy of the 2017 Wollongbar Community Survey Results. This document presents a summary of the comments received from the face to face interviews as well as on-line survey results.

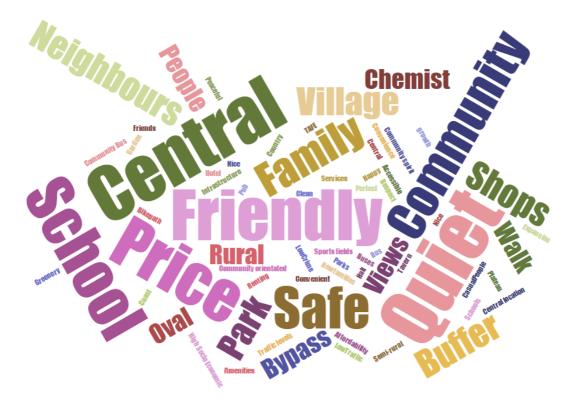
Annexure 4 contains a copy of the community engagement plan for the Wollongbar 2038 pre study consultation.

5.2 Pre Study Community Feedback

5.2.1 What Did People Say? - Face to Face Interview Results

The Word Cloud contained in Diagram 29 represents the composite comments of the 74 people interviewed.

Diagram 29 - The things we like about our village



As a general observation, it was concluded from the conversations with residents that there they enjoyed living in Wollongbar. Only one person interviewed regretted moving into this village and was considering moving closer to the coast. The people perceived as being the happiest were those interviewed within the older established residential areas. Many of these residents struggled to find any negative aspects of living in this village and community.

The community likes the friendly, quiet and safe nature of their village and what they consider their "good neighbours". They consider that Wollongbar was centrally located between Ballina and Lismore with good access to jobs. The close proximity to Ballina - Byron Gateway Airport and Brisbane was mentioned by some residents. They also consider it to be relatively affordable and often referred to price as being the reason that they initially moved to Wollongbar.

There were many positive comments about the local primary school. Many people thought that it was a very good place for their children to attend.

The community also likes the local shops and tavern although many felt that the range of shops could be improved, together with the appearance of the shopping centre.

There are things that the community considered could be improved and these are nominated in the Word Cloud contained within Diagram 30.

Diagram 30 - The things the Wollongbar community thought could be improved



Many people consider the footpath network to be inadequate. Those in the new release area (WUEA) mentioned that it does not connect up and provide a loop along Rifle Range Road, Plateau Drive, Sneaths Road and back to the Lismore Road. People who live in the older part of Wollongbar also raised concerns over the location and extent of

the local footpath network. Some also mentioned the need for more kerb ramps to access existing footpaths.

The location of the skatepark was a source of complaint. No clear consensus of which site was preferred (Plateau Drive or sports fields) was able to be gauged. Overall, a minority did not want any skate park in Wollongbar. [Note: Council subsequently decided that the skate park should be located within the Wollongbar Sports Field site].

The lack of NBN and broadband access was identified as a problem for some residents who claimed that some Wollongbar village areas would not be connected to the NBN and that no broadband access was currently available.

The safety of accessing the bypass from Sneaths Road was mentioned when turning left to Ballina as no merge lane was available. Noise control issues are also a problem for some residents who back onto the bypass and who don't have noise walls.

The appearance of the shopping centre was claimed to detract from the village character. The range of shops was also a cause for concern, with many wanting a large supermarket and access to more professionals such as doctors.

Important issues to be considered for the future of Wollongbar to 2038, as nominated in face to face interview of local residents, are the subject of the Word Cloud contained within Diagram 31.

Diagram 31 – Face to Face Interviews Important Issues to 2038



Activities for kids, more parks and parks with more facilities were common themes when residents discussed their future priorities. The skatepark was mentioned in this context.

Local traffic issues, such as a perceived need for traffic control along Rifle Range Road, at the commencement of the urban area east of the roundabout and on Plateau Drive, was mentioned by some residents. Many residents located on Plateau Drive suggested that a 50km speed limit was more appropriate for this road due to its topography and the number of children in the area.

The extent and connectivity of the footpath network in both the new and older parts of Wollongbar was frequently mentioned by residents. Connecting the footpath in Sneaths Road with the footpath to the TAFE and back to Lismore Road was seen as a priority. By 2038 many residents considered that they would have access to a network of shared paths and footpaths throughout Wollongbar, including access to new open space areas within the WUEA.

Retention of the buffer between Alstonville and Wollongbar is seen as desirable by many residents as it contributes to village character.

Better access to community transport and more frequent bus services were seen as becoming available by 2038.

The availability of more shops, especially a larger supermarket, was a priority issue for some residents, together with local access to professional services including more health care related services.

Generally, the interviewees were happy with the range of housing being provided within Wollongbar. Some suggested that greater opportunities for dual occupancy development should be provided within both the new and older parts of Wollongbar.

Several residents mentioned that the new release area is located on significant farmland and consider that opportunities for housing on this land should be maximised. This was balanced by those residents who prefer larger lots instead of what they perceive as small dense development.

As a general observation, the interviewees were perceived as accepting growth but have a strong desire for the retention of the village atmosphere and sense of community that they said currently existed in Wollongbar.

5.3 A Vision for Wollongbar's Future

Question 14 of the 2017 Wollongbar Community Survey asked residents to nominate the key words and phrases which best described the things most important for the future of Wollongbar to 2038. The responses received, together with responses to this question in the face to face interviews, were combined into a Word Cloud. The Word Cloud contained in Diagram 32 lists the top 5 most nominated words.



A draft community vision for Wollongbar's future to 2038 has been developed from the key words and themes contained within the Word Clouds contained within Diagrams 29 to 32. This draft vision will form the basis for further discussion with the Wollongbar community during 2038 and for the development of strategies aimed at achieving the vision.

'our community has a vision for the future of Wollongbar to 2038 that involves:

- Ensuring that the sense of community and wellbeing present in Wollongbar is maintained.
- Ensuring that Wollongbar continues to grow so as to facilitate well planned housing choice and employment opportunities.
- Ensuring that infrastructure such as footpaths, parks, as well as shops, services and jobs continue to be provided and enhanced for the convenience of residents.

Chapter 6 – Vision Element One: Maintaining a Sense of Community

6.1 Sense of Community - A Definition

McMillan and Chavis define sense of community as "a feeling that members have of belonging, a feeling that members matter to one another and to the group, and a shared faith that members' needs will be met through their commitment to be together."⁴¹

Neighbourhoods that display a high sense of community are characterised by the following five factors according to Tropman⁴²:

- Informal interaction opportunities (with neighbours)
- Safety (having a good place to live)
- Pro-urbanism (privacy, anonymity)
- Neighbouring preferences (preference for frequent neighbour interaction), and
- Localism (opinions and a desire to participate in neighbourhood affairs)

Field work undertaken in Wollongbar during 2017 has confirmed that there is evidence of a strong sense of community amongst local residents with little perceived difference between residents living in the WUEA or the older established residential area south of Rifle Range Road.

6.2 Maintaining a Sense of Community

Feedback obtained from Wollongbar residents indicates that they value the sense of community and friendliness of local residents that they perceive exists in the village. Respondents also consider that in the period to 2038 one of the most significant issues to be addressed relates to maintaining a strong sense of community in the face of increased population growth.

In the period between 2011 and 2016 the Wollongbar Village community has been estimated to have increased by 432 people or by some 33 households per annum. This represented an annual average population increase of 3.4% which is greater than the average annual increase of 2.65% estimated for the period from 2016 to 2038.

In the 20 year period to 2038 the Wollongbar village population is anticipated to double with an additional 2200 people living in the village.

It is concluded, based on the rate at which Wollongbar's population has been increasing historically, as well as the projected lower annual increases to 2038, that it is likely that the strong sense of community evident within this village is sustainable. To ensure that this is the case initiatives and policies that support community building may be of value.

⁴¹ McMillan D W and Chavis D M, Sense of Community: A Definition and Theory, in Journal of Community Psychology, Volume 14, January 1986. P 9

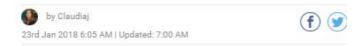
⁴² Tropman J. E. (1969). Critical dimensions of community structure: A re-examination of the Hadden-Borgotta findings. *Urban Affairs Quarterly, 5,* 215-232

6.3 How safe is our Community?

News stories such as the one which appeared in the Northern Star on 23 January 2018 (extract below) can cause a community to reflect on how safe they feel living in a particular place.



Arrests 'likely' after savage street brawls on the Plateau



POLICE say it was lucky no-one was more seriously injured in a savage street brawl of youths on the Alstonville Plateau where a 17-year-old was struck in the head with a golf club.

Richmond Local Area Command crime manager Cameron Lindsay said police would allege the affray on Rifle Range Rd, Wollongbar, about 2am on Saturday followed an earlier fight at Alstonville.

To assess how relatively safe a particular place is compared to another place, various crime statistics have been compared as detailed in Tables 16 to 19 below.

Table 16 – Selected Crime Category Rates January 2012 to December 2012 (NSW Bureau of Crime Statistics and Research Data)

Crime Type	Location and rate per 100,000 of population in 2012				
	Wollongbar	Alstonville	Ballina	Lennox Head	NSW
Assault	237.5	531.7	1725.4	390.3	894.4
Homicide	0	0	0	0	1.5
Robbery	39.6	51.5	23.8	15.6	62.7
Sexual	158.4	85.8	416.5	46.8	144.7
Offences Theft	1246	1903.9	7020.5	1233.4	3560.6
	1346				
Malicious Damage	593.8	1080.6	2106.1	624.5	1132.4

Table 17 – Selected Crime Category Rates January 2016 to December 2016 (NSW Bureau of Crime Statistics and Research Data)

Crime Type	Location and rate per 100,000 of population in 2016				
	Wollongbar	Alstonville	Ballina	Lennox Head	NSW
Assault	104.1	274.3	1553.8	273.5	816.9
Homicide	0	0	0	0	1.3
Robbery	0	0	34	0	30.5
Sexual	69.4	120	317.6	45.6	157.6
Offences					
Theft	1215.3	1680.1	6918.5	1382.6	3028.2
Malicious	381.9	891.5	1837.4	243.1	811.6
Damage					

Legend	Decline or no change	Increased compared to
	compared to 2012	2012

Table 18 – Selected Crime Category Rates January 2017 to December 2017 (NSW Bureau of Crime Statistics and Research Data)

Crime Type	Location and rate per 100,000 of population in 2017				
	Wollongbar	Alstonville	Ballina	Lennox Head	NSW
Assault	416.7	257.1	1848.7	243	810.1
Homicide	0	0	11.3	0	1
Robbery	0	17.1	68.1	15.2	31.3
Sexual Offences	104.2	154.3	306	76	170.5
Theft	1562.5	1920.1	6203.9	1337	2876.8
Malicious Damage	486.1	788.6	1871	395	788.7

Legend	Decline or no change	Increased compared to
	compared to 2012	2012

Table 19 - Number of Individuals Issued with Driving Under the Influence (PCA) Court Attendance Notice by Suburbs November 2011 to October 2013 (NSW Police Data)

Suburb	Nov 2011 – Oct 2012	Nov 2012 – Oct 2013
Wollongbar	4	2
Alstonville	13	3
Ballina	50	54
Lennox Head	33	40

Comparing crime statistic data for 2012 and 2016 indicates that there has been an improvement in each nominated category during these years. During the 5 year period 2012 to 2016 Wollongbar's population increased by approximately 18% or 500 people. Therefore, as far as Wollongbar is concerned, there appears to be no correlation between increases in population and crime levels.

Crime statistics can, however, vary from year to year and for this reason it is important to look at longer term trends rather than just comparing individual years when making assessments as to the relative safety of one community with another. For example, when comparing 2017 crime statistics with the 2012 results, Table 18, indicates that the assault rate has increased significantly (+75%) as has the theft rate (+16%). The 10 year crime trend for Wollongbar however indicates no significant changes have occurred.

When comparing Wollongbar's crime statistics with the NSW average, and the major urban centre in the shire – Ballina, it is concluded that Wollongbar remains a relatively safe community in which to live. Dave Henderson, Senior Constable Crime Prevention Officer, in an email to Council in April 2017 summed it up well by the following comment:

"There is not a lot of crime in Alstonville or Wollongbar really"

Having regard for the variability in crime statistics year to year it is concluded that it may be beneficial for the Wollongbar community to receive information from NSW Police on crime issues within Wollongbar at regular intervals. This could take the form of an annual briefing to the Wollongbar Progress Association.

Ideas - Community Building

- Retention of a rural separation between Wollongbar and Alstonville which has been referred to positively by both communities as reinforcing a strong sense of village identity.
- Review community infrastructure proposed in Council's Developer Contribution Plans to ensure it supports community building in the period to 2038.
- Encourage the establishment of Wollongbar specific service and community groups.
- Foster community building through the development of a public art program for Wollongbar and Alstonville. A suitably developed program could assist with creating and reinforcing a separate identity for each village.

Ideas – Maintaining a Safe Community

 Encourage a program of regular briefings between NSW Police and Wollongbar Progress Association.

Chapter 7 – Vision Element Two: Continued Growth to Create Well Planned Housing Choice and Employment Opportunities

7.1 Predicted Growth to 2038 - A Summary

Chapter 4 contains a detailed analysis of additional housing growth opportunities within the existing zoned residential areas of Wollongbar.

Annual population growth in Wollongbar between 2016 and 2038 has been estimated at +2.65% per annum. It is estimated that approximately an additional 2200 people will be living in Wollongbar village by that time. Based on an average of 2.6 people per household approximately 850 additional dwellings will be required by 2038 to accommodate the predicted population increase.

Additional jobs will also be required to cater for the employment needs of new residents. One way of fostering an environment for the creation of new jobs is to have available a supply of employment land suitable for industry and other employment generating land uses.

7.2 Potential Impediments to Conventional Housing Supply

It has been estimated that the existing zoned residential areas of Wollongbar have the potential to provide up to an additional 860 conventional lots / dwellings. This reduces to 490 conventional lots / dwellings if the UPA land is developed for seniors and other community housing forms (refer to data contained within Table 14 p46).

Wollongbar village serves to provide the only current source of greenfield residential lots on the Alstonville Plateau within Ballina Shire. A variety of multi-dwelling housing forms and dual occupancy are also permitted within the R3 Medium Density Residential zone which predominates in the WUEA. Factors such as market demand and topography have resulted in the majority of WUEA lots produced to December 2017 consisting of conventional residential lots. A relative minority of these lots have been developed for dual occupancy purposes.

Throughout 2017 there has been strong demand for new residential lots in the WUEA with most lots quickly selling off the plan prior to subdivision works being finalised.

Given the uncertainty associated with the development of the UPA land, and the associated potential loss of an estimated 370 conventional dwellings / lots, the identification of an alternative source of conventional housing supply may be warranted as a contingency.

7.3 SWOT Analysis of Potential Housing Supply Options to Offset UPA Land

A number of sites have been the subject of a preliminary assessment to determine their potential for urban purposes in the event that land owned by the UPA is not developed for conventional residential subdivision purposes. If UPA land is not developed a potential loss of up to 370 greenfield lots results.

A summary of the strengths, weaknesses, opportunities and threats associated with the sites evaluated for potential urban suitability is contained within Annexure 5. Only one site emerged as being considered suitable for further evaluation due to its size, location, current land use and proximity to land used for urban purposes. That site is further discussed in Section 7.4.

It is stressed that at this stage there is no need to consider releasing additional land at Wollongbar for residential purposes.

The population increase modelling (2.65% increase per annum to 2038) relies on an average of approximately 40 new lots / dwellings being created per annum. This level of land development over a 20 year period is consistent with the availability of 860 potential lots (2017 estimate refer Table 14 p47).

In the event that the 32ha of UPA land is not developed then a shortfall of up to 370 greenfield lots results. This in turn would mean that the remaining supply of 490 potential lots would be exhausted by 2029. Planning for new land releases should therefore be triggered by 2022 given the 5 to 7 year lead time between evaluation of suitability, rezoning and subdivision.

7.4 Potential Housing Supply Options to Offset UPA Land

The following two options have been considered to provide continued growth opportunities for conventional dwellings (detached dwellings and duplex dwellings) and lots:

Option 1 – Investigate the potential for an expansion of Wollongbar Village in a south – easterly direction along Rifle Range Road immediately east of Hellyar Drive and south to Elvery Lane.

Option 2 – Investigate the potential for detached dual occupancy development upon lots within the R2 Low Density Residential zone contained outside of the WUEA and which are not slope constrained.

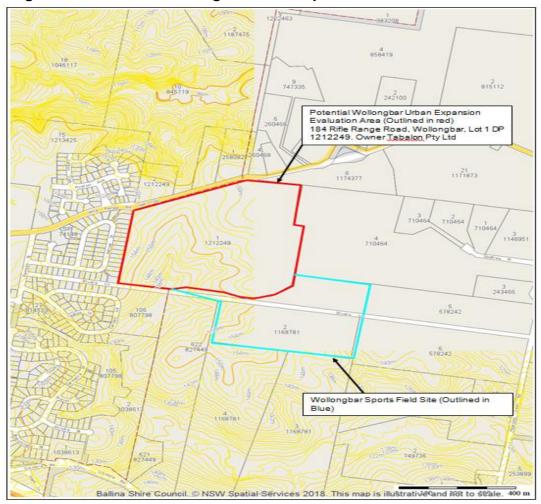
7.4.1 Expansion of Wollongbar Village Urban Footprint

One potentially suitable area for the expansion of Wollongbar village emerged as a result of the SWOT analysis of 7 sites undertaken and documented in Annexure 5. That site is known as Lot 1 DP 1212249 (Lot 1), 184 Rifle Range Road as shown by the red outline in Diagram 35 below.

Lot 1 has an area of 27.4 hectares and is currently utilised for cattle grazing. If rezoned for residential purposes, it has the potential to yield approximately 300 residential lots⁴³.

⁴³ This is based on the 11.75 dwellings per hectare estimated for infrastructure purposes within the WUEA. .

Diagram 35 - Potential Wollongbar Urban Expansion Evaluation Area



Lot 1 is considered a suitable candidate for more detailed urban expansion evaluation given its proximity and connectivity with the existing village, its generally suitable topography and relatively sparse tree cover, as well as its common rear boundary with part of the Wollongbar Sports Field site. It is the location of the sport fields that has created an opportunity to consider the potential for additional residential land immediately to the north. That is, the sports fields have defined the southern edge of potential urban development at Wollongbar even though such development would be viewed as an intrusion into the urban buffer.

The approach suggested here has some similarities with the foreshadowed future expansion of Alstonville, in a generally easterly direction along Teven Road and Gap Road, as discussed in the Alstonville Planning and Environmental Study. Such expansion, proposed for consideration once the quarry ceases to operate, also considered topography, proximity and connectivity with the existing village area, availability of road access and services.

7.4.2 Dual Occupancy Potential Within Existing R2 Zone Outside WUEA

Residential development commenced in Wollongbar in 1963 with the release of the first 10 housing lots. The next forty year period to 2003 saw the majority of residential subdivision work take place in the established residential areas outside of the WUEA.

The typical life span of a house in Australia has been estimated to be between 50 and 75 years based on various estimation methods. The Green Building Council uses a typical average life of 60 years in its Green Star suite of Rating Tools.⁴⁴

Wollongbar village contains many older single storey dwellings erected on large residential lots. Many of these dwellings are now approaching the last third of their economic life. Owners of such dwellings may be considering whether to undertake major renovations or demolition and rebuilding within the period to 2038.

Diagram 36 shows the location of R2 Low Density Residential zoned lots in Wollongbar with an area of $900m^2$ or more. Once lots located within the WUEA, large lots utilised for non-residential purposes, and those that are slope constrained are excluded, approximately 240 lots potentially suitable for dual occupancy development remain. This being approximately one third of the number of residential lots located within the Wollongbar village area outside of the WUEA.

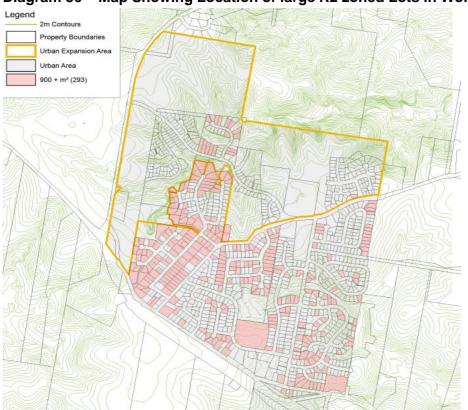


Diagram 36 - Map Showing Location of large R2 zoned Lots in Wollongbar

Permitting dual occupancy development on certain lots within the R2 zone is a strategy that may generate the following benefits:

- Provides housing choice options and generally results in a supply of smaller dwellings suitable for downsizers, first home buyers and for the rental market;
- Assists housing affordability as new dual occupancy dwellings generally sell for prices below that of new detached dwellings;
- Provides a source of potential rental income to "mum and dad" developers who
 may choose to live in one dwelling and rent the other;
- Stimulates urban renewal by providing a more economic option for the redevelopment of older dwelling sites;

⁴⁴ Edge Environment, Housing Resilience Investigation and Options Report, February 2015, p21.

- Consolidates development within areas where urban infrastructure is already provided, thereby assisting housing affordability;
- Reduces pressure for greenfield land releases by providing additional dwelling opportunities within established residential areas;
- Assists to maintain population densities within established residential areas.

Negative aspects of dual occupancy development include potential design challenges, on some sites, to ensure that adverse amenity impacts caused by issues such as overlooking and overshadowing are minimised.

It is estimated that the uptake rate for dual occupancy development on suitable lots will be relatively slow due to the variability in condition of existing housing stock. An estimate of half the suitable lots (120) being redeveloped by 2038 is considered realistic. This would result in some 6 dual occupancy projects being built per annum until 2038 and would result in a total of an additional 60 dwellings.

7.5 Labour Force and Employment Implications of Increasing Population

Planned population growth in Wollongbar and Alstonville to 2038 is estimated to result in an additional 3500 people living in these plateau villages. Approximately 50% of these people are likely to be in the labour force and will either have jobs or be searching for work.⁴⁵

A trend already emerging in Wollongbar relates to higher labour force participation rates (LFPR) as the population increases 46 . The Wollongbar LFPR has increased from 77% in 2011 to 81% in 2016. As the population increases, with more people in the working age cohort (15 – 64 age group), it can be expected that there will be an increasing demand for local jobs.

The lack of significant growth in local employment opportunities is considered to be a contributing factor to increased unemployment. In the period between 2011 and 2016 the Wollongbar unemployment rate increased from 4.6% to 6.3%. This compares with a reduction in the Ballina Shire average unemployment rate from 6.3% to 5.9% and a slight increase in the Alstonville unemployment rate from 5.6% to 5.9% in the same 5 year period.

7.6 Creating Employment Opportunities Through Land Supply

Local economic activity is likely to be stimulated through increases in population to 2038. Existing businesses and industries will benefit from this and additional employment opportunities are likely to be created as a consequence of greater demand for goods and services.

Creating opportunities for new businesses and industries to establish through ensuring an adequate supply of employment land is a strategy that is likely to facilitate the creation of more local employment opportunities.

Lawrence Consulting undertook a Ballina Shire wide commercial and industrial land assessment in 2014. Their report estimated that employment growth in the period 2011 to 2031 would result in an additional 1739 jobs being created in Ballina Shire outside of

⁴⁵ Based on 2016 Census results - 1416 people were reported as being in the labour force from a total population of 2828.

⁴⁶ Labour force participation rate as calculated by the OECD is determined by dividing the number of people in the labour force including those unemployed by the total working age population (persons aged 15 to 64).

the Ballina, Lennox Head – Skennars Head, employment hubs⁴⁷. It has been assumed that the majority of this employment growth will take place on the Alstonville Plateau and be associated with economic activity at Alstonville and Wollongbar including within the Russellton Industrial Estate.

Table 20 contains data extracted from the Lawrence Consulting's *Commercial and Industrial Land Assessment Report* that provides an indicator of jobs per hectare for various industrial and commercial uses⁴⁸.

Table 20 – Employee Site Area Ratios for Specific Industry Types

Industry Type	No of Employees per Hectare
Manufacturing	25
Electricity, gas, water & waste services	36
Construction	36
Wholesale Trade	42
Retail Trade	100
Rental, hiring & real estate services	167
Transport, postal and warehousing	19

Based on the employee per hectare data contained within Table 20, a conservative assumption has been made that, within the Russellton Industrial Estate, land usage generates approximately 20 to 30 jobs per hectare.

7.7 Employment Opportunities - Rezoning Land for Industrial Purposes Adjoining the Russellton Industrial Estate

Contained within the Russellton Industrial Estate is approximately 16 ha of vacant General Industrial zoned land of which approximately 4.7ha is owned by NSW Roads and Maritime Services (land adjoining the Bruxner Highway). Of the remaining 11ha of land, the majority is owned by Ballina Shire Council (excluding old tennis court site 2.386ha sold in April 2018).

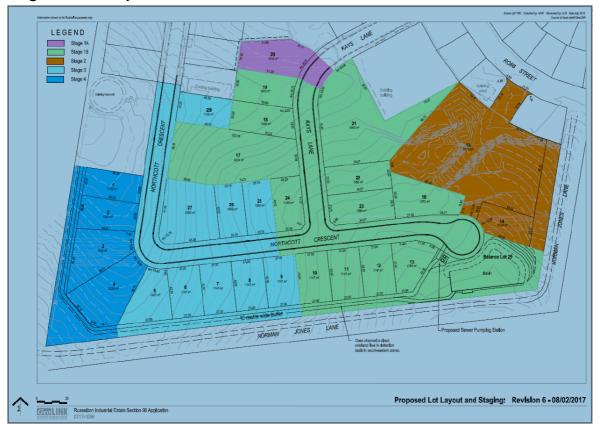
An operational development consent for 28 industrial lots and a drainage basin exists over Ballina Shire Council owned land known as Lot 2 DP 1169163 (DA2008/803). Challenges associated with this subdivision have included the need to negotiate land owner agreements with three adjoining owners and the steeper site topography which has impacted land development costs. The creation of larger lots in excess of 3000m² has also posed difficulties due to site topography constraints.

The Lot Layout and Staging Plan associated with Council's industrial land subdivision are shown in Diagram 37. Proposed Lot 20 (stage 1A) was sold at auction in April 2018 with the remaining lots not yet released (May 2018). This land may effectively represent the last viable release of industrial land within the existing Russellton Industrial Estate with other available land (RMS owned) being subject to significant slope and vegetation constraints.

⁴⁷ Lawrence Consulting, Ballina Shire Commercial and Industrial Land Demand Assessment, December 2014 – see Table 5 on page 6

⁴⁸ Lawrence Consulting, Ballina Shire Commercial and Industrial Land Demand Assessment, December 2014 – information extracted from Table 6 on page 7.

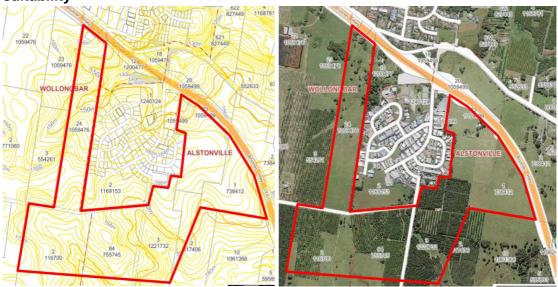
Diagram 37 - Proposed Subdivision of Council owned land Lot 2 DP 1169153



Due to the limited supply of industrial zoned land within the Russellton Industrial Estate land on the southern, western and eastern sides of the estate have been subject to a preliminary examination for suitability to support industrial land uses.

Diagram 38 below shows by red outline the land subject to a preliminary investigation as to its potential to support industrial development.

Diagram 38 – Location of land subject to preliminary evaluation for industrial suitability



The preliminary evaluation of the land edged red in Diagram 38 found that it was only the land on the eastern edge of the Russellton Industrial Estate that has potential

suitability for industrial development. The land located to the west and south of the estate is significantly slope constrained and has at this stage been assessed as generally unsuitable for industrial development.

The land outlined in red in Diagram 39 is considered a suitable candidate for investigation as to its industrial rezoning potential. This view is based on the land's more gentle overall topography, its current use for grazing, lack of extensive tree cover and its ability to integrate with existing road access arrangements from the Bruxner Highway and Lismore Road. This land is also partially visible from the Bruxner Highway which may have added appeal for some industry types.

The land designated for further investigation as to its industrial development potential is currently designated as State Significant Farmland and is zoned 7(i) Urban Buffer under the provisions of Ballina LEP 1987. These two constraints are likely to pose significant future barriers to rezoning.

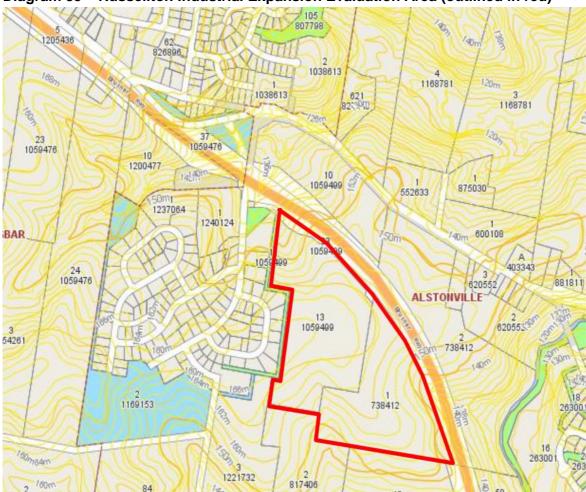


Diagram 39 – Russellton Industrial Expansion Evaluation Area (outlined in red)

The land shown by the red outline in Diagram 39 has an area of approximately 23 hectares. This gives it a capacity to accommodate approximately 500 to 700 jobs utilising some of the more conservative job creation estimates for industry types nominated by Lawrence Consulting.

In the event that the land outlined in red in Diagram 39 is considered a suitable candidate for industrial rezoning then the 10 metre wide strip of Council owned open space along part of its western edge may also become surplus to requirements. This

land was created in 1978 as a buffer between the industrial estate and the adjoining farm land.

The former Wollongbar basketball court located on a triangular piece of RE1 Public Recreation zoned land, on the corner of Kays Lane and Dulcet Lane, may also become surplus to Council requirements should a basketball court be provided elsewhere to service Wollongbar residents. The utility of the existing court site to support industrial development is being investigated (May 2018). If found to be suitable, and economically viable to develop, for industrial purposes then the rezoning and reclassification of the existing court site to IN1 General Industrial and for operational purposes could be further considered.

During the course of the 2017 community consultation a submission was received from Newton Denny and Chapelle. The submission requested Council to conduct a detailed review with respect to the quantum of vacant industrial zoned land available in Wollongbar and to identify suitable locations for the expansion of the Russellton Industrial Estate.

Specifically, Newton Denny and Chapelle requested that Council consider the suitability of Lot 24 DP 1059476 which is located on the western side of the Russellton Industrial Estate (refer Diagram 39). Lot 24 is zoned RU1 Primary Production and is used for cattle grazing. It is subject to more significant slope constraints than land on the eastern side of the Russellton Estate with part of this land being designated as being potentially land slip affected. This land also does not enjoy the road access advantages of the land on the eastern side of the Russellton Estate. For these reasons Lot 24 has not been nominated for further investigation as to its suitability for an industrial zoning.

Photo 2 – View of land on southern side of Dulcet Lane suggested for evaluation as to its industrial suitability



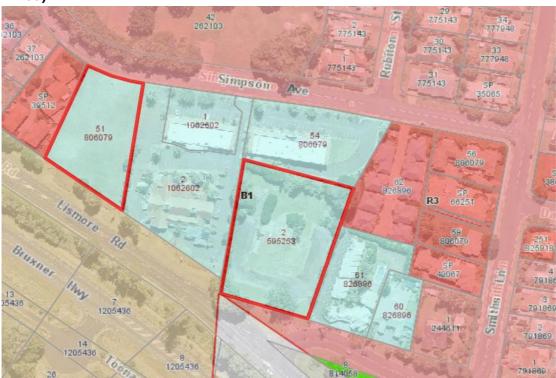
Photo 3 - View of land on southern side of Dulcet Lane suggested for evaluation as to its industrial suitability



7.8 Employment Opportunities - Undeveloped Business Land in Wollongbar

Wollongbar village contains approximately 1 hectare of vacant zoned B1 Neighbourhood Centre land which adjoins the Palms Shopping Centre in Simpson Avenue on its western and southern side. Diagram 40 shows the location of this land by red outline.

Diagram 40 – Vacant Commercial Land Wollongbar Commercial Centre (outlined in red)



Land to the west of the Palms Shopping Centre, known as 48-50 Simpson Avenue, was offered for sale during 2017. During this period Council staff received an enquiry regarding its rezoning potential for residential purposes. Advice was provided that it was

considered premature to consider a residential rezoning given the planned expansion of Wollongbar and the community's expressed desire for a broader range of shops and services to be established in Wollongbar.

The land to the south and rear of the shopping centre, known as 186 – 190 Lismore Road, is owned by IGA Distribution Pty Ltd. It has been the subject of a number of development consents (now all expired) for uses such as a 68 place child care centre (2004), and the construction of an IGA supermarket and associated shops (2010).

Based on the data previously provided to Council by Lawrence Consulting, one hectare of commercial land used for retailing has the potential to provide jobs for approximately 100 people.

It is envisaged that as the population of Wollongbar continues to grow to 2038 vacant business zoned land in Wollongbar will be developed for business and commercial purposes. For this reason proposals to rezone any of this land for residential purposes are difficult to support at this time. It is noted however that shop top housing is currently permitted with consent within the B1 zone.

Mike Svikis Planning, in a 2018 discussion paper commissioned by Council, titled 'Residential Accommodation in Business Zones", recommended changing the zoning of the Wollongbar shopping centre precinct from B1 Neighbourhood Centre to B2 Local Centre. ⁴⁹ This was suggested to recognise the centre's future growth potential and to enable it to benefit from a larger range of uses permitted within a B2 centre. It is noted that the Alstonville business centre is the subject of a B2 Local Centre zoning.

Alstonville was designated as B2 Local Business Centre in Ballina Local Environmental Plan 2012 as a consequence of recommendations contained within the 2003 Ballina Retail Strategy. That strategy concluded that Alstonville provides retail, commercial, community and residential services at a district scale whilst Wollongbar provides such activities to service the local community⁵⁰.

The 2003 Ballina Retail Strategy was based on a target population for Alstonville of 5,000 and 4,500 for Wollongbar. It was also prepared prior to the Alstonville Bypass being constructed. In 2003 it was estimated that 45% of the traffic in Main Street was through traffic⁵¹.

Since 2003 the population forecasts for Alstonville and Wollongbar have changed. Alstonville is anticipated to now grow to in excess of 7,000 people (Alstonville Planning and Environmental Study), and Wollongbar to in excess of 5,000 people by 2038. Through traffic in Main Street, Alstonville has also been significantly reduced since the opening of the Bruxner Highway bypass in 2011. It is these changes that have brought about a reconsideration of the retail strategy as it applies to the Plateau Villages, and a proposal that Wollongbar and Alstonville be both considered as local centres in terms of the shire retail hierarchy.

⁵¹ Ballina Retail Strategy, August 2003, p25.

⁴⁹ Mike Svikis Planning Residential Development in Business Zones, discussion paper, February 2018, p33.

⁵⁰ Ballina Retail Strategy, August 2003, p25.

Photo 4 - Palms Shopping Centre Wollongbar Village



Photo 5 - Vacant Business Zoned Land 48 - 50 Simpson Avenue, Wollongbar



7.9 Alstonville Waste Water Treatment Plan Masterplan

During 2018 a Waste Water Treatment Plant (WWTP) Master Plan will be prepared for the Alstonville WWTP. It is the Alstonville WWTP located in Johnston Road, Alstonville that treats residential and non-residential sewage for the Alstonville and Wollongbar villages. The WWTP Masterplan will provide long term (20 year) strategic direction for future capital and operating decision making relating to this plant.

The population and lot assumptions contained within Chapter 4 of this study and the population projections contained within the Alstonville Planning and Environmental Study are being considered in the preparation of the Masterplan. This is to ensure that any planned WWTP works are undertaken within the strategic timetable and population growth assumptions developed as part of the Planning and Environmental Study process.

Ideas – Maintaining Residential Land Supply Opportunities

- Investigate the potential for an expansion of Wollongbar Village in an easterly direction along Rifle Range Road immediately east of Hellyar Drive and south to Elvery Lane.
- Investigate the potential for detached dual occupancy development upon lots within the R2 Low Density Residential zone contained outside of the WUEA and which are not slope constrained (Slope equal to or greater than 20%).

Ideas - Maintaining Employment Opportunities in the Business Zone

- Retain existing business zoned land within Wollongbar Village.
- Consider rezoning the Wollongbar business zone from B1 Neighbourhood Centre to B2 Local Centre so as to increase its status within the shire's retail hierarchy and broaden the range of permitted uses.

Ideas – Maintaining Employment Opportunities through Industrial Land Supply

- Consider the expansion of the Russellton Industrial Estate in an easterly direction to provide an additional 23ha of industrial (employment) land.
- Consider the rezoning to IN1 General Industrial and reclassification (community to operational) of the 10 metre wide strip of RE1 Public recreation zoned land which forms the eastern edge to the Russellton Industrial Estate.
- Consider the future utility of the former Wollongbar basketball court site with frontage to Kays Lane and rezone and reclassify this site for industrial purposes should it be found to be surplus to requirements and feasible for industrial development.

Chapter 8 - Vision Element Three: Provision of Adequate Levels of Infrastructure to Support Growth

8.1 Pedestrian Access and Mobility Plan 2018/19 – 2026/27 (PAMP)

The PAMP was exhibited for community feedback in November 2017. The PAMP functions as a strategic plan for identifying and prioritising pedestrian facility works to improve access, mobility and safety for the Ballina Shire community. Once adopted by the Council (anticipated mid 2018) the PAMP will inform the allocation of funds for pathway and cycleway construction projects in the period to 2027.

Council currently spends around \$460,000 each year on new pedestrian capital works, with additional funding available through grants on a 50/50 funding basis. Council spends about \$157,000 annually in maintaining the existing footpaths and shared paths in addition to the construction of new footpaths throughout the Shire.

Table 21 details the PAMP works proposed for Wollongbar in the period to 2027. The location of works is shown in Diagram 39. In total, proposed Wollongbar PAMP works were estimated to cost \$266,170 in 2017.

Based on submissions received from the Wollongbar community the works proposed for Rifle Range Roads were nominated as having the highest priority.

Table 21 - Extract from Exhibited PAMP - Delivery Plan - Wollongbar

PAMP Works ID	Total Value	Road Name	Project	Total Cost Footpath Project	Budget Years	PAMP Submission ID
WBW38	57	Rifle Range Rd	Construct new 645m path and 4 kerb ramps (Estimate is based on footpath standard only. There is an expected cost increase for shared paths. Shared paths will potentially be allocated funding subject to the priority ranking under Council's Bike Plan. This means the progress through the PAMP priority ranking may be subject to change. This is reviewed annually in the preparation of the Delivery Plan).	\$96,675	2021-2022	122WB
WBW72	40	Rubiton St	Construct new 295m path and a kerb ramp (Estimate is based on footpath standard only. There is an expected cost increase for shared paths. Shared paths will potentially be allocated funding subject to the priority ranking under Council's Bike Plan. This means the progress through the PAMP priority ranking may be subject to change. This is reviewed annually in the preparation of the Delivery Plan).	\$40,825	2025-2026	228WB
WBW78	35	Queens Park Ct, Central Park Dr, Midway Ave	Construct new 482m and 6 kerb ramps	\$76,670	2025-2026	229WB
WBW81	35	Smith Ln	Construct new 320m path and 3 kerb ramps	\$52,000	2026-2027	5 Previous PAMP
			TOTAL COST	\$266,170		

The PAMP is typically reviewed at 5 yearly intervals and a new PAMP is prepared generally at intervals of 10 years. To 2038 there are likely to be several more opportunities for the Wollongbar community to consider the need for and location of PAMP related works.

Legend Proposed Ramps/Refuges Proposed Pathways Proposed Cycleways Existing Pathways Existing Cycleways 500 metres Figure 5K - Wollongbar PAMP Delivery Program 2018/19-2026/27 GNA Printed 18/10/2017

Diagram 40 - Exhibited PAMP Showing Location of Wollongbar Proposed Works

8.2 Ballina Shire Bike Plan 2017

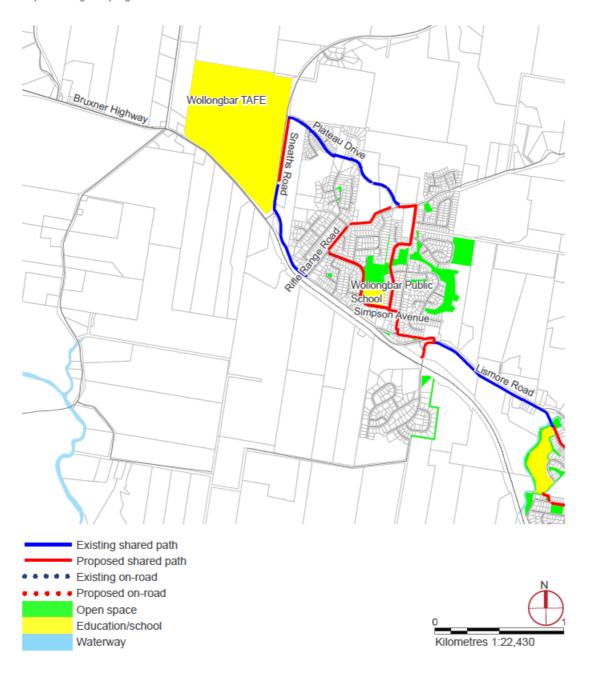
The Bike Plan was completed in July 2017 and provides additional opportunities for Wollongbar which include the following:

- New shared path connections within and between towns in the Shire
- Safety for cyclists
- Cycling support facilities, such as signs, lighting, and bike parking areas, and
- Promotion of cycling in the community.

Diagram 41 contains an extract from the Ballina Shire Bike Plan which shows proposed extensions to the shared path network at Wollongbar. Proposed shared path sections contained within the Bike Plan have been incorporated within the PAMP.

Diagram 41 - Ballina Shire Bike Plan Wollongbar

Wollongbar's cycling environment and identified missing links



8.3 Ballina Shire Open Space and Community Facilities Contribution Plan 2016

Council adopted the *Ballina Shire Open Space and Community Facilities Contributions Plan 2016* (the Plan) at its Ordinary Meeting on 24 November 2016. The Plan became operational on 1 January 2017. The Plan was prepared under the provisions of s94 of the Environmental Planning and Assessment Act 1979 (now s7.11).

The Plan sets out the contribution requirements for development which requires consent. Council has identified that new housing development in Wollongbar will increase the demand for public amenities and public services within this area. The Plan therefore specifies the nature of facilities that will be provided using contributions levied under the provisions of the Plan. Conditions of development consent impose a requirement for the payment of contributions which are typically levied at the subdivision stage when new housing lots are created.

The Plan is based on an additional 800 dwellings being constructed in Wollongbar to 2036. Table 22 contains a list of public amenities and services proposed to be funded (in part or fully) by the Plan.

Table 22 – Public Amenities and Services Funded Through s7.11 Contributions at Wollongbar

Public Amenities and	Estimated Total Cost 2016	% Funded by
Services		Contributions
Acquisition of land for	\$1,588,210	65%
Wollongbar Sports Fields		
(13.29ha)		
Wollongbar Sports Field	\$4,000,000	65%
embellishment (2 x rugby		
grounds and lighting, 1 x		
cricket oval, 6 x tennis courts		
and lighting, 4 x netball courts,		
club house facilities,		
pedestrian and vehicular		
access and parking.		
Wollongbar District Park	\$1,000,000	100%
embellishment including skate		
park		
Community centre building	\$900,000	Not yet determined
(minimum size of 250m ²)		-
TOTAL	\$7,488,210	

Where the contributions levied under the provisions of the Plan are insufficient to fund the whole of the facility Council is required to fund the balance. This process is called apportionment and takes into account the fact that in some cases the demand for facilities and services also comes from existing residents of Wollongbar. For example residents outside of the WUEA may also generate a demand for facilities provided in response to the demand generate by new residents of the WUEA. In such cases Council must meet the cost of servicing the demands of existing residents.

In the period to 2038 it is through the mechanism of the PAMP and the Open Space and Community Facilities Contribution Plan that infrastructure will be provided to service the demands generated by new and existing residents of Wollongbar. The review mechanisms contained in both plans will ensure that at regular intervals

(generally 5 years) the plans are reviewed to ensure that they are delivering appropriate facilities and services according to the needs of the community.

8.4 Wollongbar Sports Fields

The Wollongbar Sports Fields were officially opened in April 2018 - refer extract from the Ballina Shire Advocate newspaper in Diagram 42. The sports field site has a total land area of 13.85 hectares and contains regional sporting facilities including tennis and netball courts, 2 rugby ovals and a combined AFL and cricket oval. It is also the proposed site (May 2018) of the Wollongbar skate park facility.

Access to the Sports Field site is obtained via Elvery Lane at Wollongbar or Pearces Creek Road at Alstonville. The provision of off road pedestrian and cycle access to the sports fields from both the Alstonville end via Pearces Creek Road and via Ramses Street and Elvery Lane at Wollongbar may be suitable for consideration in the PAMP and the Ballina Shire Bike Plan at their next review.

Diagram 42 – Ballina Advocate news story 2 May 2018



Ideas - Review of Planned Infrastructure Facilities

- Review pedestrian and cycleway infrastructure proposed in Council's Pedestrian
 Access and Mobility Plan and the Ballina Bike Plan to ensure that pedestrian and
 cycle infrastructure continues to be provided to meet community needs in the period
 to 2038.
- Review community infrastructure proposed in Council's Developer Contribution Plan to ensure it supports community building in the period to 2038.
- Consider the provision of off road pedestrian and cycle access to the Wollongbar Sports Field site when the PAMP and Ballina Shire Bike Plan are next reviewed.

Chapter 9 – Conclusions – A Way Forward

Population Overview

In 1963 the first residential release of land in Wollongbar resulted in the creation of 10 allotments, "and by 1971 the village comprised 38 dwellings and 68 vacant lots. 52"

The village of Wollongbar emerged as having the fastest growth rate of any urban centres within Ballina Shire during the intercensal period of 1986 to 1991, recording an annual growth rate of 12.4%. It had reached a total population of 1268 persons at the time of the 1991 Census.⁵³

In the 5 year period to 2016 the population of Wollongbar had increased by 18% to 2828 people. Only Cumbalum with a 5 year growth rate totalling 24.65% exceeded Wollongbar's population growth during this period. Wollongbar therefore continues to provide an important source of greenfield housing lots and the only source of greenfield lots on the Alstonville Plateau within Ballina Shire.

By 2038 the population of Wollongbar is estimated to increase to 5014 people (2.65% per annum increase 2018 – 2038). This level of growth has been estimated as requiring an additional 850 homes to be provided.

Dwelling Capacity Estimate

This study has shown that within the existing zoned residential areas of Wollongbar there is potential for 860 residential lots (720 potential lots within WUEA, 78 potential lots outside of the WUEA and 62 vacant subdivided residential lots). The threat to greenfield lot supply is the uncertainty associated with the development of 32ha of land owned by the United Protestant Association (UPA). If this land is not developed to support conventional residential development (detached housing on individual lots) then a potential shortfall of up to 370 greenfield lots will result in Wollongbar.

It is considered reasonable to consider alternative locations to offset the potential loss of conventional residential lots in Wollongbar to 2038. An alternative 27ha site on Rifle Range Road has been identified for further evaluation should the need arise once UPA master planning has been completed. If additional residential land is able to be released then this will alter population projections for Wollongbar to 2038 depending on the nature of development that results on UPA owned land.

Triggers to consider the release of additional residential land outside of the WUEA could include the development of UPA land for non-conventional residential subdivision purposes and or 75% or more of zoned residential areas within the WUEA being

⁵² Urban Land Release Strategy, February 1996, p20

⁵³ Urban Land Release Strategy, February 1996, p20

subdivided. At this stage it is envisaged that decisions concerning the maintenance of residential land supply will need to be made in the period after 2022.

To facilitate greater housing choice options on residential land outside of the WUEA, the potential for some larger residential lots (900m² or above) to support dual occupancy development has been considered. This policy initiative if supported has been estimated to produce approximately 6 duplex dwellings per annum to 2038. The value of this policy initiative relates more to providing an alternative source of smaller dwellings within established areas rather than making a significant contribution to housing supply.

Employment Opportunities

It is considered to be critical that as the population of Wollongbar expands a supply of employment land is maintained. This study has shown that suitable land within the Russellton Industrial Estate is extremely limited and a case exists for the investigation of an additional source of suitably located industrial land.

Preliminary investigation of available options have concluded that it would be preferable to consider an expansion of the Russellton Industrial Estate as opposed to creating new employment lands elsewhere on the Plateau. Expanding the Russellton Industrial Estate in an easterly direction appears to have greater merit than an expansion towards the west. In total, approximately 23ha of land has been identified for further evaluation as to its potential to support industrial development. It is estimated that this land has the potential to provide an additional 500 – 700 jobs.

There is also potential for land zoned for business purposes within Wollongbar to be developed in the period to 2038. Approximately 1ha of vacant B1 Neighbourhood Centre land exists in Wollongbar. This has the potential to support approximately 100 additional jobs.

The appropriateness of the B1 business zone has been brought into question given the remaining growth potential of Wollongbar. It is considered appropriate to designate the Wollongbar business precinct as a local centre (the same as Alstonville). This will lift the status of this centre within the retail hierarchy and may assist in providing a stimulus to further business development in Wollongbar to 2038.

Wollongbar Future Vision to 2038

This study has examined the potential that exists within Wollongbar to expand over the next 20 year period. There appears to be a level of community acceptance that growth will continue into the future having regard to the quantity of undeveloped land still available. The concern expressed is that growth needs to be properly managed so that the strong sense of community that is present in Wollongbar is maintained, and that adequate infrastructure is provided to support growth.

The draft vision that has been developed for further discussion with the Wollongbar community references the acceptance of growth as well as concerns relating to the avoidance of negative growth consequences.

'our community has a vision for the future of Wollongbar to 2038 that involves:

- Ensuring that the sense of community and wellbeing present in Wollongbar is maintained
- Ensuring that Wollongbar continues to grow so as to facilitate well planned housing choice and employment opportunities
- Ensuring that infrastructure such as footpaths, parks, as well as shops, services, and jobs continue to be provided and enhanced for the convenience of residents

The ideas contained within the draft Wollongbar Planning and Environmental Study have been incorporated into the draft Wollongbar Strategic Plan. The community is encouraged to read and make comments in respect to both documents. All suggestions and ideas for additional response strategies will be considered by the elected Council prior to the Wollongbar Strategic Plan 2038 being adopted.

Once Council endorses the exhibition of the draft Wollongbar Planning and Environmental Study and the draft Wollongbar Strategic Plan it is anticipated that they will be placed on exhibition for community feedback for a period of up to three months.

Annexures

Annexure 1 – Extract from Ballina Shire Growth Management Strategy 2012

Wollongbar

Locality Vision / Character Statement:

The character of Wollongbar is a reflection of the low density residential scale, undulating topography and proximity to surrounding high quality agricultural lands.

Future planned development of Wollongbar will be accommodated by a substantial northern expansion of the existing village footprint, strengthening the distinct character of the locality. The neighbouring village of Alstonville will continue to provide the bulk of local commercial and community facilities for both villages.

The Russellton Industrial Estate, located between Wollongbar and Alstonville, provides the key employment centre for the plateau. A range of land use activities occur within the estate including light industrial manufacturing, repair services and plant nurseries.

Main Features:

- Predominantly a low density residential area, serviced by limited commercial facilities, recreation and education establishments (Wollongbar Primary School), other than the Russellton Industrial Estate and neighbourhood scale commercial area.
- Proximity to high quality agricultural lands, the Wollongbar campus of North Coast TAFE and a Department
 of Primary Industries (DPI) research station.
- The Wollongbar Urban Expansion Area (WUEA) comprising approximately 80 hectares of land is located immediately to the north of the existing urban area of Wollongbar.
- Strong relationship with the village of Alstonville.

Key Issues:

- Predominantly a 'dormitory suburb' servicing the local primary employment centres of Ballina and Lismore, with little local employment opportunities other than the Russellton Industrial Estate and commercial developments and Government offices in Alstonville.
- Significant scope for outward expansion, via the Wollongbar Urban Expansion Area, having capacity to accommodate an additional 900 dwelling units (approximately).
- Local commercial and social facilities provided in Alstonville.
- The Wollongbar area contains Aboriginal, European and other non-Aboriginal heritage sites/values.
- The Wollongbar area contains land that has high agricultural production value.

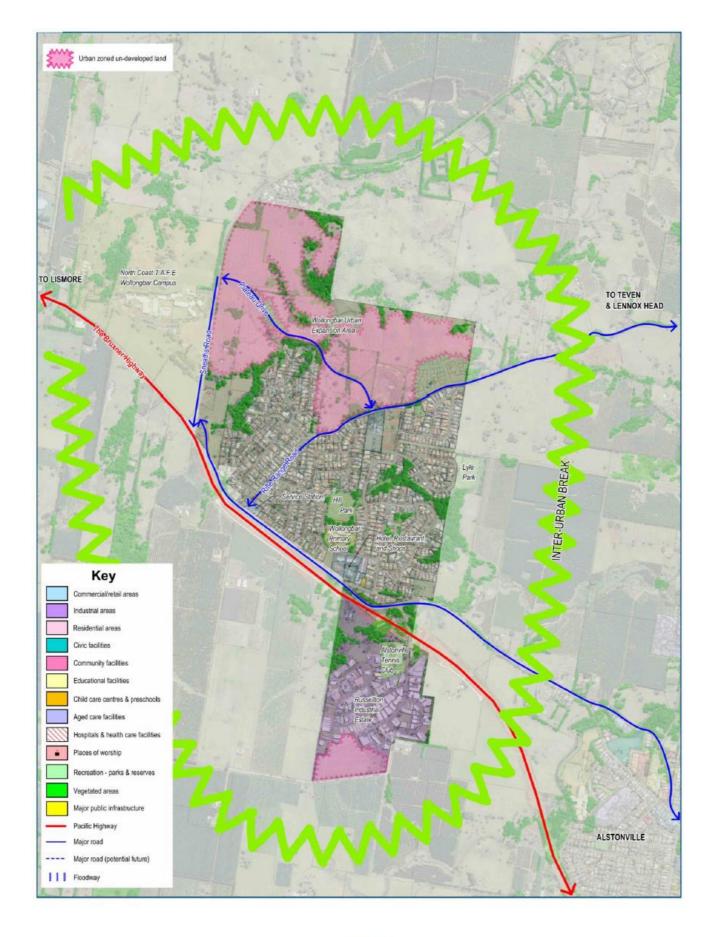
Locality Objectives:

Maintain the low scale residential character of the village.

- Reinforce the status of Russellton Industrial Estate as the dominant local employment hub and industrial centre.
- Provide for the infrastructure needs of the growing community, including sport and recreational facilities and community halls.
- Manage Aboriginal, European and other non-Aboriginal cultural heritage values in accordance with best practice guidelines.

Strategic Actions:

- Accommodate further population growth through implementation of the Development Control Plan for WUEA via the development assessment process.
- Plan for the provision of additional sporting facilities to service the increasing population.
- Maintain the urban buffer / inter-urban break between Wollongbar and Alstonville.
- Revisit the Third Plateau Village concept.
- Manage and/or promote Aboriginal, European and other non-Aboriginal cultural heritage values in accordance with relevant stakeholders.



Page 50

Annexure 2 - Two BioNet Atlas of NSW Search Results

Data from the BioNet Atlas of NSW Wildlife website, which holds records from a number of custodians. The data are only indicative and cannot be considered a comprehensive inventory, and may contain errors and omissions. Species listed under the Sensitive Species Data Policy may have their locations denatured (^ rounded to 0.1°; ^^ rounded to 0.01°). Copyright the State of NSW through the Office of Environment and Heritage. Search criteria: Public Report of all Valid Records of Entities in selected area [North: -28.77 West: 153.34 East: 153.51 South: -28.88] returned a total of 10,833 records of 897 species.

Animalia	Aves	Anseranatid *	0199	Anseranas semipalmata	Magpie Goose	V,P		2	i
Animalia	Aves	Columbidae *	0025	Ptilinopus magnificus	Wompoo Fruit-Dove	V.P		8	*
Animalia	Aves	Columbidae *	0021	Ptilinopus regina	Rose-crowned Fruit-	V,P		24	
Animalia	Aves	Columbidae *	0023	Ptilinopus superbus	Superb Fruit-Dove	V,P		1	
Animalia	Aves	Ciconiidae	0183	Ephippiorhynchus asiaticus	Black-necked Stork	E1,P		7	1
Animalia	Aves	Ardeidae *	0196	Ixobrychus flavicollis	Black Bittern	V,P		1	i
Animalia	Aves	Accipitridae *	0218	Circus assimilis	Spotted Harrier	V,P		11	
Animalia	Aves	Accipitridae *	0223	^Erythrotriorchis radiatus	Red Goshawk	E4A,P,2	V	2	i
Animalia	Aves	Accipitridae *	0226	Haliaeetus leucogaster	White-bellied Sea-	V,P	С	8	i
Animalia	Aves	Accipitridae *	0225	Hieraaetus morphnoides	Little Eagle	V,P		6	i
Animalia	Aves	Accipitridae *	8739	^^Pandion cristatus	Eastern Osprey	V,P,3		2	i
Animalia	Aves	Falconidae [*]	0238	Falco subniger	Black Falcon	V,P		1	i
Animalia	Aves	Rallidae	0053	Amaurornis moluccana	Pale-vented Bush-hen	V,P		3	i
Animalia	Aves	Laridae "	0972	Gygis alba	White Tern	V,P		1	
Animalia	Aves	Tytonidae *	0252	^^Tyto longimembris	Eastern Grass Owl	V,P,3		5	i
Animalia	Aves	Tytonidae	0250	^^Tyto novaehollandiae	Masked Owl	V,P,3		1	
Animalia	Aves	Campephagi [*] dae	0428	Coracina lineata	Barred Cuckoo-shrike	V,P		1	i
Animalia	Aves	Artamidae	8519	Artamus cyanopterus cyanopterus	Dusky Woodswallow	V,P		5	i
Animalia	Aves	Monarchida [*]	0376	Carterornis leucotis	White-eared Monarch	V,P		1	i
Animalia	Mammalia	Dasyuridae [*]	1008	Dasyurus maculatus	Spotted-tailed Quoll	V,P	E	7	i
Animalia	Mammalia	Dasyuridae [*]	1045	Planigale maculata	Common Planigale	V,P		2	
Animalia	Mammalia	Phascolarcti dae	1162	Phascolarctos cinereus	Koala	V,P	V	211	
Animalia	Mammalia	Macropodid ae	1234	Thylogale stigmatica	Red-legged Pademelon	V,P		2	i
Animalia	Mammalia	Pteropodida [*]	1280	Pteropus poliocephalus	Grey-headed Flying-fox	V,P	V	21	
Animalia	Mammalia	Vespertilion I idae	1346	Miniopterus australis	Little Bentwing-bat	V,P		2	i
Animalia	Mammalia	Vespertilion /	1834	Miniopterus schreibersii oceanensis	Eastern Bentwing-bat	V,P		2	i
Animalia	Mammalia	Vespertilion Vespe	1357	Myotis macropus	Southern Myotis	V,P		4	
Animalia	Mammalia	Vespertilion /	1336	Nyctophilus bifax	Eastern Long-eared Bat	V,P		1	
Animalia	Insecta	Carabidae	1009	^^Nurus atlas	Atlas Rainforest Ground- beetle	E1,3		1	i

Animalia	Insecta	Noctuidae	1021	Phyllodes imperialis	Southern Pink	E1	Е	2	
				southern subspecies	Underwing Moth				_
Plantae	Flora	Apocynaceae	1233	Marsdenia longiloba	Slender Marsdenia	E1,P	V	1	i
Plantae	Flora	Apocynaceae	1176	Ochrosia moorei	Southern Ochrosia	E1,P	E	9	
Plantae	Flora	Asteraceae	6943	Blumea lacera		E4,P		1	i
Plantae	Flora	Euphorbiace ae	9466	Acalypha eremorum	Acalypha	E1,P		2	i
Plantae	Flora	Euphorbiace ae	8325	Baloghia marmorata	Jointed Baloghia	V,P	V	6	
Plantae	Flora	Fabaceae	2833	Desmodium	Thorny Pea	V,P	V	2	i
		(Faboideae)		acanthocladum					
Plantae	Flora	Fabaceae (Faboideae)	3030	Sophora fraseri	Brush Sophora	V,P	V	2	i
Plantae	Flora	Fabaceae (Mimosoide ae)	7757	Archidendron hendersonii	White Lace Flower	V,P		5	i
Plantae	Flora	Lauraceae	3477	Cryptocarya foetida	Stinking Cryptocarya	V,P	V	1	i
Plantae	Flora	Lauraceae	3491	Endiandra hayesii	Rusty Rose Walnut	V,P	V	1	i
Plantae	Flora	Lauraceae	8480	Endiandra muelleri subsp. bracteata	Green-leaved Rose Walnut	E1,P		2	
Plantae	Flora	Meliaceae *	3682	Owenia cepiodora	Onion Cedar	V,P	V	1	i
Plantae	Flora	Menisperma Ceae	7167	Tinospora smilacina	Tinospora Vine	E1,P		1	i
Plantae	Flora	Menisperma [*] ceae	3691	Tinospora tinosporoides	Arrow-head Vine	V,P		51	
Plantae	Flora	Myrtaceae	11894	Gossia fragrantissima	Sweet Myrtle	E1,P	E	3	i
Plantae	Flora	Myrtaceae	4290	Syzygium hodgkinsoniae	Red Lilly Pilly	V,P	V	21	i
Plantae	Flora	Myrtaceae *	4292	Syzygium moorei	Durobby	V,P	V	1	
Plantae	Flora	Orchidaceae *	7077	^Oberonia titania	Red-flowered King of the Fairies	V,P,2		2	i
Plantae	Flora	Poaceae	4776	Arthraxon hispidus	Hairy Jointgrass	V,P	V	31	i
Plantae	Flora	Proteaceae *	5354	Floydia praealta	Ball Nut	V,P	V	7	i
Plantae	Flora	Proteaceae *	5432	Hicksbeachia pinnatifolia	Red Boppel Nut	V,P	V	3	i
Plantae	Flora	Proteaceae	5446	Macadamia tetraphylla	Rough-shelled Bush Nut	V,P	V	13	
Plantae	Flora	Sapindaceae *	5889	^Diploglottis campbellii	Small-leaved Tamarind	E1,P,2	E	7	i
Plantae	Flora	Sapotaceae *	11957	Niemeyera whitei	Rusty Plum, Plum Boxwood	V,P		1	i
_									

BioNet Atlas Legend

- 1 Sensitivity Class 1 (Sensitive Species Data Policy)
- 2 Sensitivity Class 2 (Sensitive Species Data Policy)
- 3 Sensitivity Class 3 (Sensitive Species Data Policy)
- CH Critical Habitat (Threatened Species Conservation Act 1995)
- E1 Endangered (Threatened Species Conservation Act 1995)
- E2 Endangered Population (Threatened Species Conservation Act 1995)
- E3 Endangered Ecological Community (Threatened Species Conservation Act 1995)
- E4 Presumed Extinct (Threatened Species Conservation Act 1995)
- E4A Critically Endangered (Threatened Species Conservation Act 1995)
- E4B Critically Endangered Ecological Community (Threatened Species Conservation Act 1995)
- FCE Critically Endangered Fish (Fisheries Management Act 1994)
- FE Endangered Fish (Fisheries Management Act 1994)
- FEC Endangered Ecological Community of Fish (Fisheries Management Act 1994)
- FEP Endangered Population of Fish (Fisheries Management Act 1994)
- FKTPKey Threatening Process of Fish (Fisheries Management Act 1994)
- FP Protected Fish (Fisheries Management Act 1994)
- FV Vulnerable Fish (Fisheries Management Act 1994)

- FX Extinct Fish (Fisheries Management Act 1994)
- KTP Key Threatening Process (Threatened Species Conservation Act 1995)
- P Protected (National Parks & Wildlife Act 1974)
- V Vulnerable (Threatened Species Conservation Act 1995)
- V2 Vulnerable Ecological Community (Threatened Species Conservation Act 1995)

Commonwealth status

C	Listed on China Australia Migratory Bird Agreement
CD	Conservation Dependent (Commonwealth EPBC Act 1999)
CE	Critically Endangered (Commonwealth EPBC Act 1999)
E	Endangered (Commonwealth EPBC Act 1999)
J	Listed on Japan Australia Migratory Bird Agreement
K	Listed on Republic of Korea Australia Migratory Bird Agreement
KTP	Key Threatening Process (Commonwealth EPBC Act 1999)
V	Vulnerable (Commonwealth EPBC Act 1999)
X	Extinct (Commonwealth EPBC Act 1999)
XW	Extinct in the Wild (Commonwealth EPBC Act 1999)

Annexure 3 – Wollongbar 2017 Community Survey Results

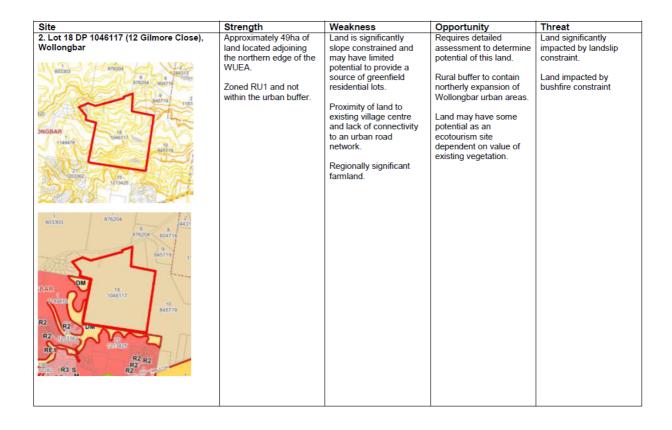
Under Separate Cover

Annexure 4 – Wollongbar Pre-Study Community Engagement Plan 2017

Initial community consultation strategy for preparation of the draft Wollongbar Planning and Environmental Study and draft Wollongbar Strategic Plan 2018 – 2038

	Actions
	Veb based surveys residential and
	s and occupiers.
Preparation of V	Veb page Wollongbar 2038
	tin item detailing consultation
strategy dates a	
	nunity groups and Progress
Association	
	roperty owners in Kurrabri Estate
advice re door k	<u> </u>
Media release a	and interviews – Wollongbar 2038
Ballina Shire Ac	vocate notice
	roperty owners in older Wollongbar
	advice re door knocking
	on Paradise FM re staff at
Wollongbar sho	
	or discussion / questions at
1	pping centre – 2 week day
afternoons.	
Staff door knock	king in Karrabri Estate
	on Paradise FM prior to staff door
<u> </u>	rabri Estate, Wollongbar,
	lvocate notice re door knocking and
request for com	
	on Paradise FM re staff at door
	longbar and survey prompt
	king older Wollongbar residential
estate propertie	
Facebook posts	s – Corporate Site
Community Cor	nect Story
	n and letter box delivery to all
residential prope	erties (1000) in Wollongbar

Annexure 5 – Preliminary SWOT Analysis of Potential Wollongbar Urban Suitability Sites



Site	Strength	Weakness	Opportunity	Threat
3. Lot 10 DP 845719, 165 Rifle Range Road,	Approximately 32ha of	Land is significantly	Requires detailed	Land significantly
Wollongbar 876204	land adjoining the north - eastern edge of the	slope constrained and may have limited	assessment to determine potential of this land for	impacted by landslip constraint.
6 8 244313 900m	WUEA	potential to provide a	purposes other than	constraint.
876204 604716		source of greenfield	agricultural uses.	Land impacted by
999m 9 2 157719 1187475	Zoned RU1 and not within the urban buffer.	residential lots.	Rural buffer to contain	bushfire constraint
116/4/5	within the urban buller.	Proximity of part of this	north - easterly	
A CONTRACTOR OF THE PARTY OF TH		land to existing village	expansion of Wollongbar	
THE SECOND STATES		centre.	urban areas.	
18 17 V2000		Regionally significant		
0 8457/19 g		farmland.		
747335				
75 1213425				
3/ Balling 194				
24 Daylord XIII				
876204 876204 604716				
20.				
1187475 383208				
7 (
18 1046117				
10 845719 g				
7877335 RU1				
935.490 82 B2				
R2				
RE1 R3 R3				

Site	Strength	Weakness	Opportunity	Threat
4. Lot 2 DP 1212249, 155 Rifle Range Road, Wollongbar	Approximately 2 ha of land adjoining the eastern edge of the WUEA. Zoned RU1 and not within the urban buffer.	Relative small size of site. Approximate half of this site not slope or vegetation constrained. That part of the site not slope constrained is designated as State significant farmland. Site not sufficiently large to resolve potential need for greenfield residential lots. Land does not have a road network link into residential area adjoining its western boundary.	Part of site may have urban potential to yield approximately 10 residential lots.	Relatively small isolated site from remainder of WUEA.

Site	Strength	Weakness	Opportunity	Threat
7. Lot 10, DP 1059499, Lismore Road,	Approximately 7ha of	Land forms part of the	Requires detailed	None identified at
Alstonville	vacant rural land.	urban buffer between	assessment to determine	preliminary assessment
Maria Service Company Service Company		Wollongbar and	potential of this land for	stage.
Will have been seen as a second secon	Land form not slope	Alstonville.	purposes other than	
	constrained	Otata singificant familiard	agricultural uses.	
E27440		State significant farmland	Rural buffer assists to	
		Part of lot impacted by	prevent easterly	
		bushfire prone land and	expansion of Wollongbar	
450049 41230400		landslip constraints.	urban areas.	
Tomas		Isolated site with		
		relatively poor		
		connectivity with existing		
		Wollongbar urban area.		
		Dort of land advancely		
		Part of land adversely impacted by drainage		
and the second second		constraints.		
		Constraints.		
THE PERSON NAMED IN COLUMN TWO IS NOT THE PERSON NAMED IN COLUMN TWO IS NAM		Noise impact from		
		adjoining Bruxner		
		Highway		
1				