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Alstonville Planning and Environmental Study

prepared by Ballina Shire Council

06/2017

PREFACE

This study has been prepared following initial consultation with the Alstonville community to identify issues of significance and the community's future aspirations for their village.

The study was initially released in draft format during April and May 2017 to enable the Alstonville community to review its contents, suggestions and ideas. Comments received during the public exhibition period assisted in finalising the study prior it being submitted to the Council for final adoption on 27 July 2017.

Accompanying this study is the Alstonville Strategic Plan 2017 – 2037.

COVER IMAGE:
Mosaic tapestries in Freeborn Park, Alstonville completed by plateau community members and school students in 2010.

MAPPING

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Alstonville Planning & Environmental Study

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In the 1880s Charles Bulwinkel collected 80 platypus pelts which were then made into a rug.

The rug is currently exhibited in the Powerhouse Museum (PHM) in Sydney. It was also on display at Crawford House during 2012 whilst on loan from the PHM.

the platypus skin rug

If you tread lightly at dawn or dusk when wandering along the banks of Maguires or Duck Creek at Alstonville you may well be rewarded with glimpses of a platypus swimming or hunting for food. Today platypuses are still plentiful within the creeks located on the plateau. There was a time in Alstonville's not too distant past when platypuses were hunted for their fur.

The following is an extract from the PHM website which provides more details about the platypus rug[1]:

"The pelts from the platypuses were collected in the 1880s by local Alstonville sugarcane industry businessman Charles Bulwinkel. When Charles died in 1918 the pelts were passed to his daughter Greta Denison, and it was Greta who had the pelts put together as a rug (Turnbull, 2012, p.18[2]). The rug has been designed in a diamond pattern fully taking advantage of the two main colours of a platypus' fur – the golden underbelly and the dark brown back. Though it can be disturbing today to think of how many animals were killed to make the rug, the rug is reflective of a time when it was considered normal to use native animal products for food, rugs, clothing, and decoration, and prior to legislation banning the practice of hunting platypus and other native animals (Turnbull, 2012, p.18). Thankfully platypuses continue to be plentiful in the Alstonville area today.*

The Platypus is a protected native fauna under the provisions of the National Parks and Wildlife Act 1974, but is currently not a threatened species in NSW.

1 Extract taken from Powerhouse Museum website https://maas.museum/inside-the-collection/2012/10/31/tales-of-a-travelling-platypus-supporting-regional-museums/

2 Turnbull, A 2012, 'A tail of a platypus', Powerline, Spring 2012, no.107, p.18.

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 and Wardell now completed.

1.1 Alstonville overview

Alstonville is a village located on the Alstonville Plateau situated approximately 7.5 km to the west of Ballina and 1.5 km to the south-east of Wollongbar. The following excerpt from the Sydney Morning Herald (8/2/2004) described Alstonville as:

Alstonville is a pleasant little hinterland village which is largely driven by the usual array of attractions – antique shops, gift shops – surrounded by rolling hills where avocados and macadamia nuts grow.

Not surprisingly, given the proximity of the booming towns of Lismore and Ballina, Alstonville tends to concentrate fairly heavily on tourism with the locals using the larger centres as their shopping destinations.

In 2016 Alstonville had an estimated population of 5844 people.

1.2 Planning history

The reason for the preparation of a strategic plan for Alstonville 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 limits[1].

Alstonville's nominated target population in 2000 was around 5,000 people[2].

The 2001 Census revealed that Alstonville had a population of 5,226 people (Estimated Resident Population).

The candidate village sites considered by the Council in 2001 are shown in Diagram 1. 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.

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 Alstonville. The BSGMS is discussed in greater detail in Section 1.2.

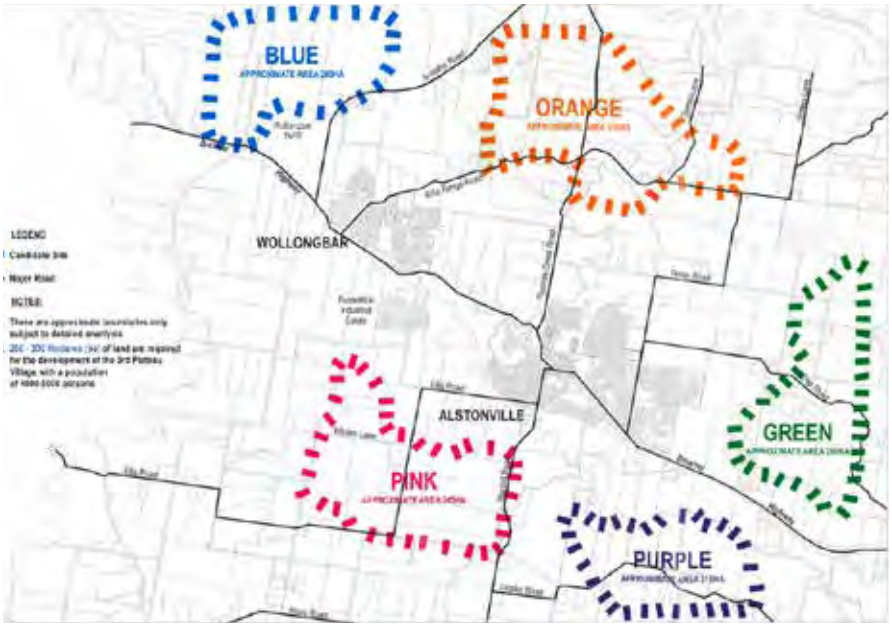
1 GeoLINK – 3rd Plateau Village, Report on Phase 2 – 3rd Plateau Village Investigations, 2001, p12

2 GeoLINK – 3rd Plateau Village, Report on Phase 2 – 3rd Plateau Village Investigations, 2001, p3

To facilitate a more detailed review of the opportunities available and issues impacting on the villages of Alstonville and Wollongbar the Council, at its meeting on 28 April 2016, resolved to prepare place based strategic plans for Alstonville and Wollongbar. 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 Alstonville Planning and Environmental Study is the mechanism through which issues impacting on and opportunities related to Alstonville have been examined. The Alstonville Strategic Plan has been developed in response to identified issues, and community comments received during the pre-study consultation period. Key issues identified include population growth, village character and housing choice. The Alstonville Strategic Plan contains specific actions to guide the future of Alstonville over the next 20 year period.

Diagram 1: 2001 Candidate Village Sites



The following section briefly outlines the strategic planning framework applicable to Alstonville 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.

Alstonville is referenced within the NCRP 2036 as fulfilling local service needs for residents who are based further inland or on the coast. The plan also supports employment lands and jobs at Alstonville, together with the protection of important farmland. It also supports the development of the agricultural sector and agribusiness.

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

The NCRP 2036 also 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 been discontinued following extensive community consultation.

A direction issued by the Minister for Planning in April 2017 (s117(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 in the 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. Unlike the FNCRS which set a target of an additional 8,400 dwellings in the period 2006 to 2031. The NCRP 2036 does project the population to increase to 45,850 (42,506 estimated 2016) and dwellings to increase to 22,000 by 2036 (18,991 estimated 2016).

The NCRP 2036 encourages housing diversity through an Action which stipulates that 40% of new housing is to be delivered in the form of dual occupancies, apartments, townhouses, villas, or dwellings on lots less than 400m^2 by 2036.

Given that no Future Urban Release Areas were identified for Alstonville in the NCRP 2036, any additional dwellings can presently only be achieved through infill development within existing appropriately zoned areas.

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

The planning and environmental study and associated strategic planning processes for Alstonville 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 prepared by Council is of relevance because it examined retailing and commercial activity within Alstonville and Wollongbar. It concluded that Alstonville was a district level centre (providing services beyond the local area) and Wollongbar was a local centre.

In terms of factors considered to impact on retailing within Alstonville, the BRS concluded that population growth, and the then proposed Alstonville Bypass, were the main impacting factors. The "target" resident population for Alstonville was nominated as 5,000 people and 4,500 people for Wollongbar.

Population data for Alstonville from the 2001 Census (All people – Location on Census Night) indicates a resident population of 4,751[3] (Estimated Resident Population (ERP) of 5226 persons). It would appear that Alstonville by 2003 had already achieved its then "target" population.

In terms of the Alstonville Bypass, the BRS considered that as a consequence of tourist traffic diverting through Alstonville, after the bypass construction, the net effect would be slightly beneficial for retailing[4].

3 ABS QuickStats 2001 Alstonville (UCL)

4 Ballina Retail Strategy August 2003, p25

Table 1: Extract from Ballina Shire Growth Management Strategy 2012

LOCALITY OBJECTIVES	STRATEGIC ACTIONS
• maintain the village 'scale' and 'character' of Alstonville • retain the village footprint • accommodate further infill development in a manner that is sensitive to the village character and heritage values • provide for changing housing needs • manage Aboriginal, European and other non-Aboriginal cultural heritage values in accordance with best practice guidelines	• identify opportunities for additional seniors living facilities • investigate the potential for infill development intensification • review planning controls for village centre following construction of the Bruxner Highway bypass • preserve the integrity of the village footprint • 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

The BRS nominated the following relevant Retail Strategies for the Plateau Villages[5]:

- 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, consolidate retailing at Alstonville within a core area
- maintain the existing character of the Alstonville Village Centre through the consistent application of DCP No 6
- maintain the integrity of the Russellton Industrial Estate by consistently applying clause 27 of Ballina LEP 1987 (Permits retailing of bulky goods within industrial zone).

5 Ballina Retail Strategy August 2003, p25

The above strategies relating to the Alstonville business centre have been maintained albeit that Ballina DCP 2012 Chapter 6(b) has now replaced DCP No.6.

In respect to bulky goods retailing being permitted within the Russellton Industrial Estate it is noted that the IN1 General Industrial zone, 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 urban buffer areas located to the west, north and east of Alstonville and which provide the separation between Alstonville and Wollongbar. These areas have retained their 7(i) Environmental Protection (Urban Buffer) zone under the provisions of BLEP 1987 and are nominated as a "Deferred Matter" in Ballina Local Environmental Plan 2012 (BLEP 2012).

Council 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 at its meeting on 27 April 2017. 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).

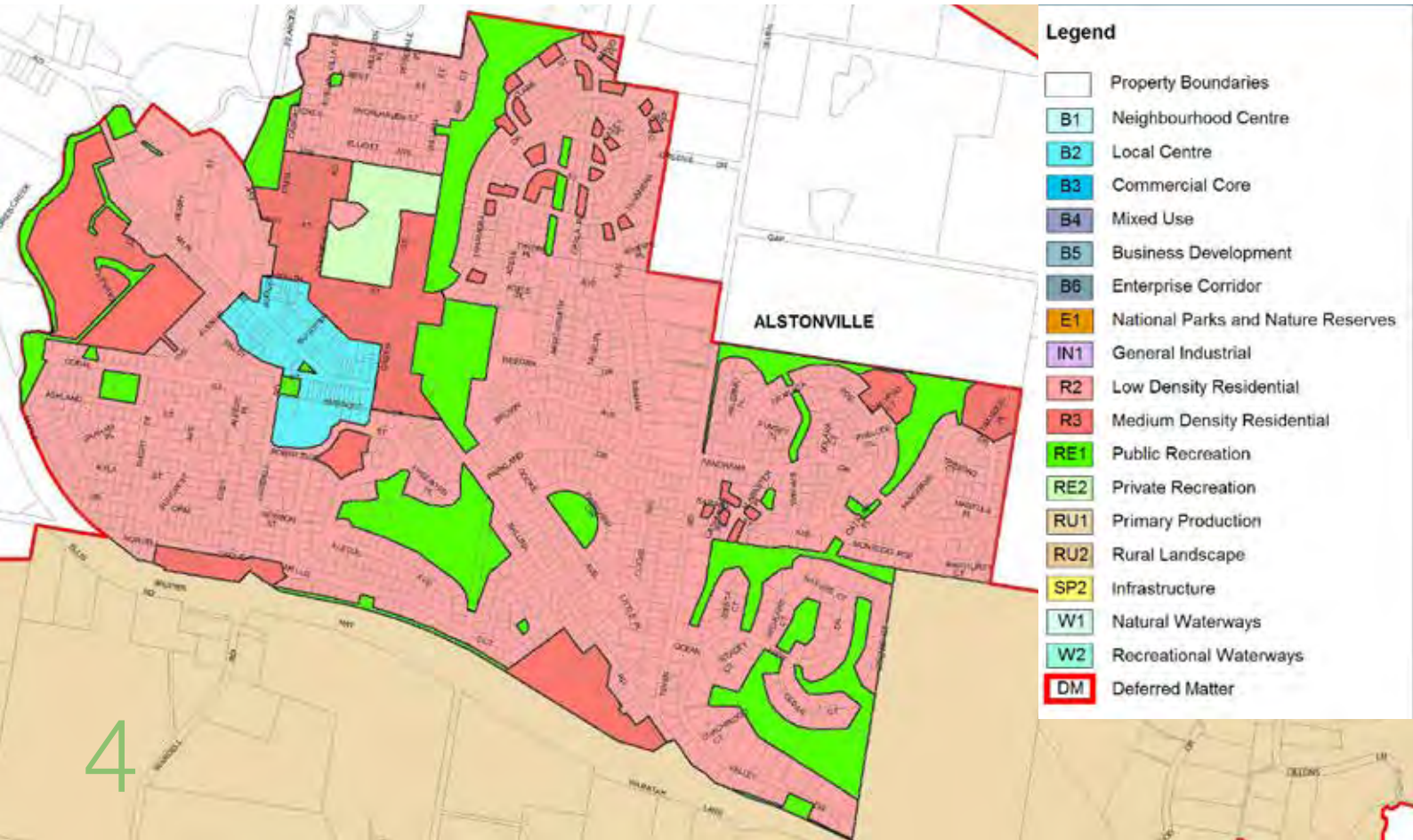
Previously proposed environmental zones were unable to be incorporated within BLEP 2012 due to the State Government's Northern Councils E zone review process. This process prevented the five Far North Coast councils from incorporating environmental zones within local environmental plans made in the period September 2012 to March 2016.

Ballina Local Environmental Plan 2012 (BLEP 2012)

BLEP 2012 has applied to the urban areas of Alstonville and to the rural areas located generally on its southern side since 4 February 2013. An extract from BLEP 2012 is contained in Map 1.

BLEP 2012 contains the legislative provisions through which land use planning is regulated in Alstonville. Provisions of relevance include an 8.5 metre building height limit for residential areas, minimum lot size for subdivision of 600m^2 for the R2 Low Density Residential

Map 1: Land Zoning Plan for Alstonville Village and Surrounds BLEP 2012



zone, 800m^2 for the R3 Medium Density Residential and B2 Local Centre zones and land use tables which contain zone objectives and details of which land uses are permitted with or without development consent, or which are prohibited.

1.4 Alstonville/ Wollongbar urban buffer area

The concept of a rural buffer separating the 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 established[6]. 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 Alstonville and Wollongbar was subsequently incorporated into the Ballina Shire Local Environmental Study in 1983 which preceded the preparation of Ballina LEP 1987.

6 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.

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"

Aerial view of Alstonville and surrounds

1.5 Location, geology and climate

Alstonville is located at a latitude of 28.84 degrees south and a longitude of 153.46 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. It comprises approximately 20% of Ballina Shire[7].

Much of Alstonville Plateau was also 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[8].

The Alstonville Plateau has a distinctive geology and climate.

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

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

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[9].

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 Alstonville Village is located in The Avenue which has a height of 156 metres (AHD) above sea level.

Alstonville's mean annual minimum and maximum temperatures are within the range of 15°C to 23.5°C. 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.

Diagram 3 has been extracted from the Weatherzone website and provides details of rainfall and temperatures recorded at the Alstonville Tropical Fruit Research Station (http://www.weatherzone.com.au/climate/station.jsp?lt=site&lc=58131).

9 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.

Diagram 2: Extract from Map 4 Northern Rivers Farmland Project

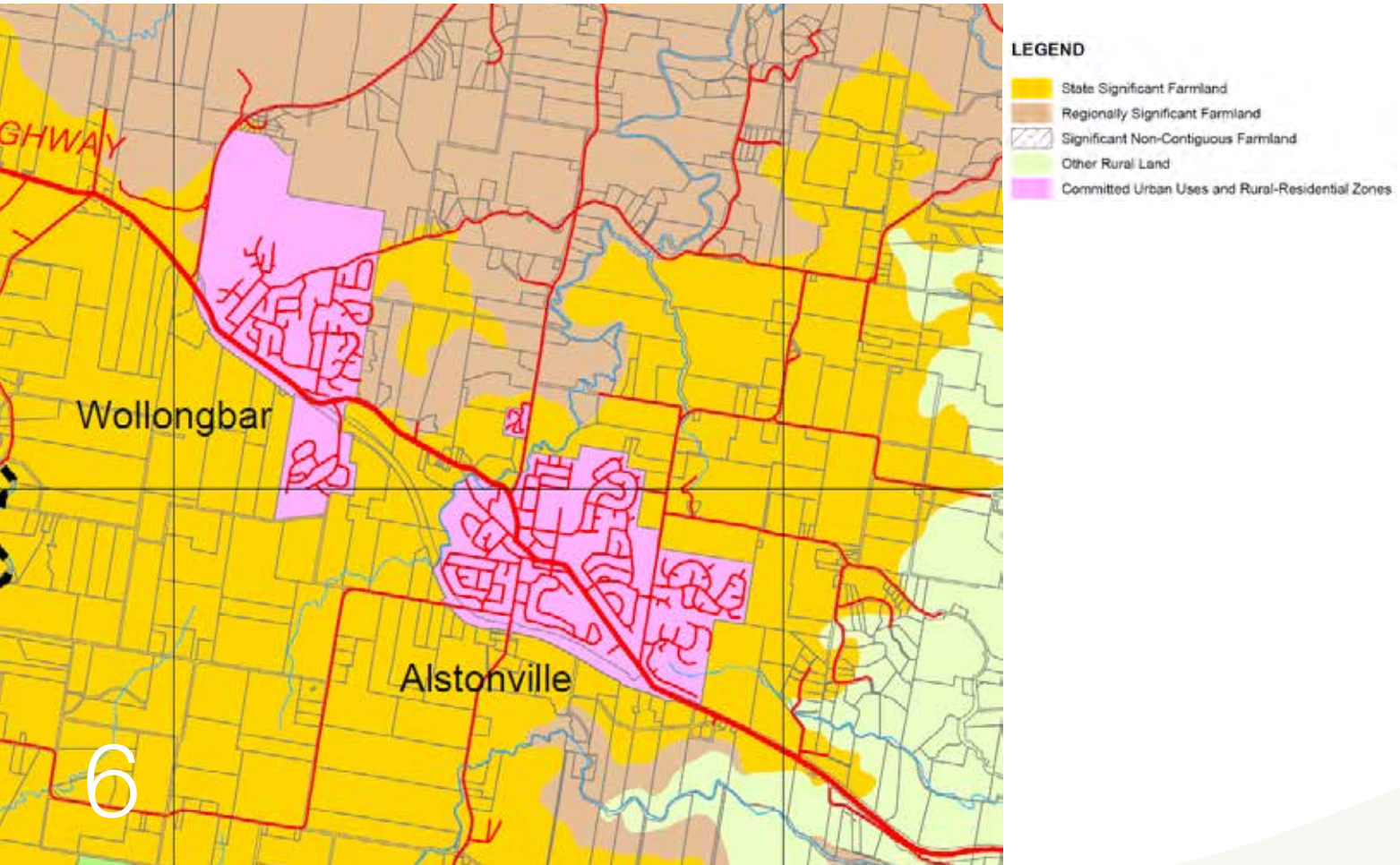


Diagram 3: Alstonville Annual Temperature and Rainfall Data

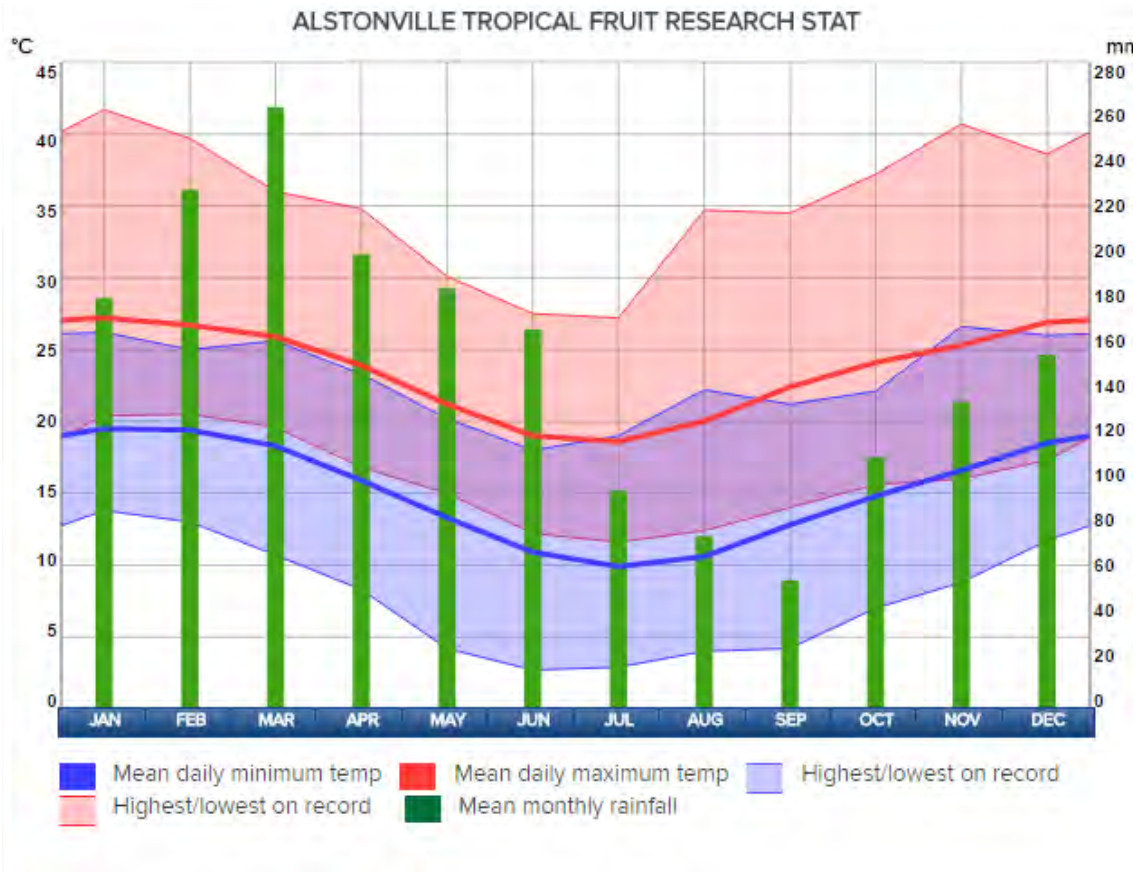
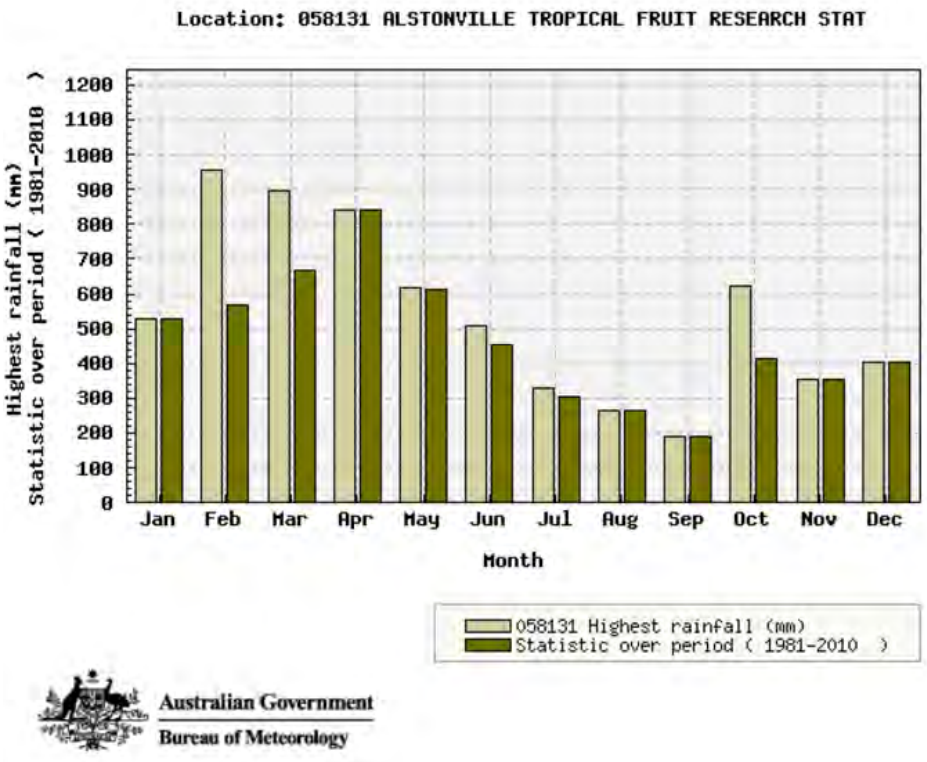


Diagram 4: 1981 – 2010 Rainfall Data – Alstonville Tropical Fruit Research Station

In respect to rainfall patterns over a 30 year period (1981 – 2010) additional information is contained within Diagram 4 produced by the Australian Bureau of Meteorology.



1.6 Aboriginal and European occupation

Aboriginal people have occupied the North Coast of NSW for at least 45,000 years[10].

The Alstonville Plateau forms a part of the Bundjalung nation, the location of which is shown in Diagram 5.

The Alstonville Plateau according to Keats is located within Nyangbal and Wiyabal tribal language areas.

European settlement occurred on the Alstonville Plateau in 1865 with the arrival of the Freeborn families. Andrew Freeborn selected the first portion of land, being Portion 1, Parish of Tuckombil, County of Rous, located near Perrys Hill in 1865. By 1880 most of the land on the Plateau had been selected. Settlers grew a variety of crops, fruit and vegetables and cane. Prior to these settlements cedar camps were established on the Plateau by cedar cutters, however, few details are available as to their precise locations.

One cedar camp was located near Duck Creek (a tributary of Emigrant Creek) located at a distance of 4 – 5 miles to Duck Creek Mountain[11]. It was from here that supplies were carried by the first settlers to Duck Creek Mountain.

Duck Creek Mountain changed its name to Alstonville in 1873 so as to avoid confusion with other localities of the same name[12]. The name change was initiated by John Perry, the local store owner and postmaster, who

10 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

11 Crawford F Duck Creek Mountain Now Alstonville, 2007, page 2

12 Information contained in the Alstonville Plateau Historical Society web site http://aphsmuseum.org.au/ - Tour Alstonville

Diagram 5: Aboriginal Nations Map

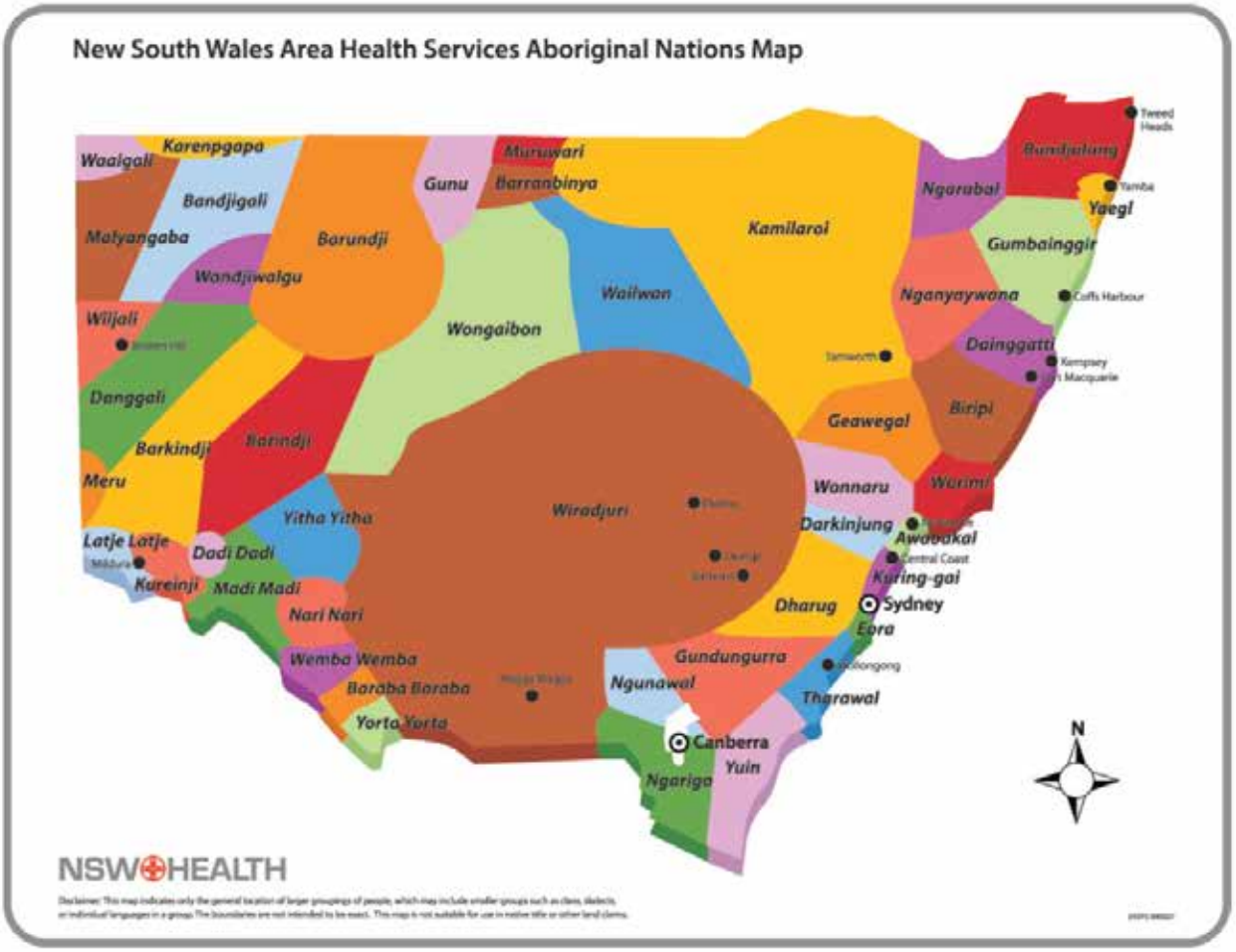
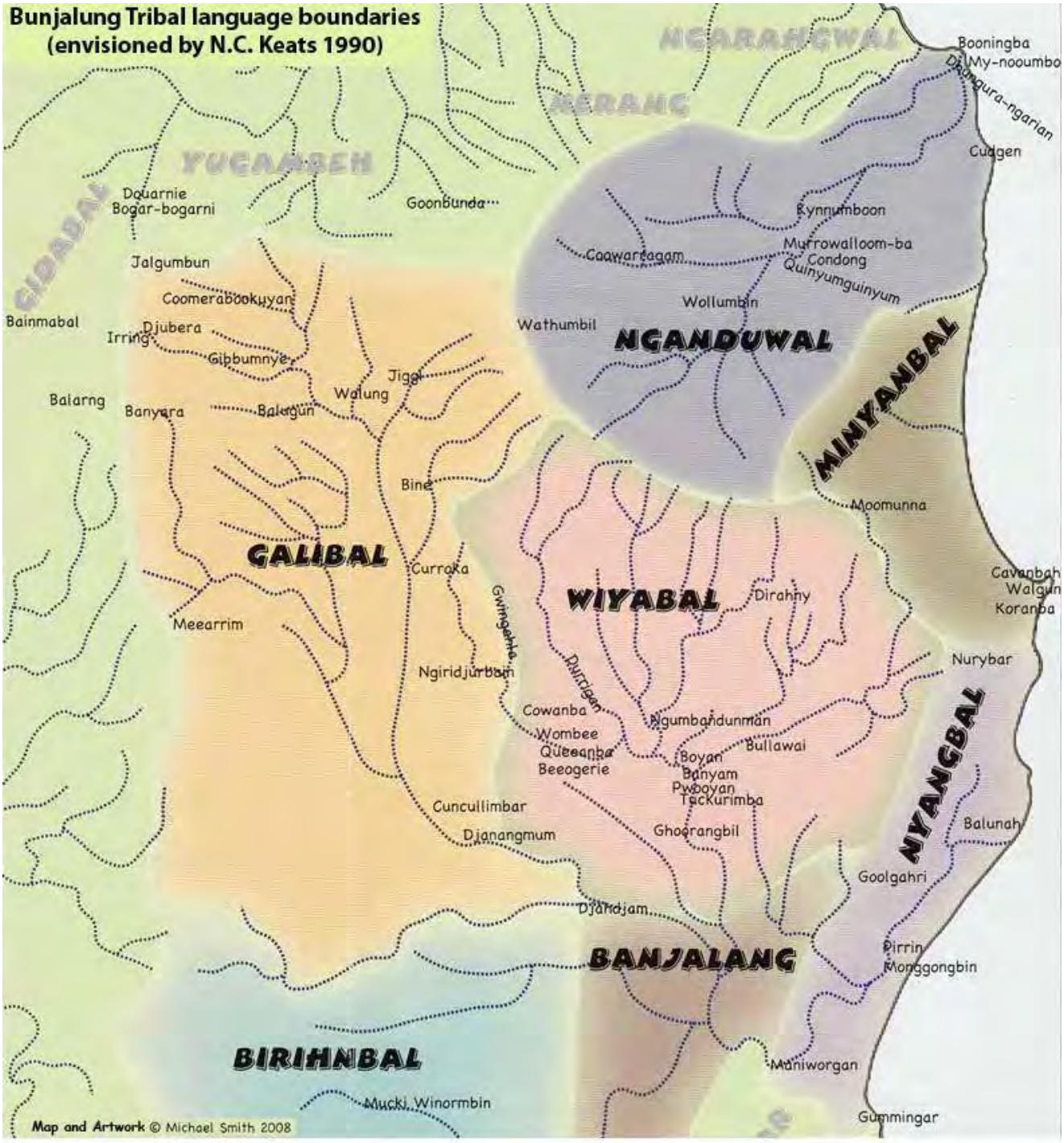


Diagram 6 - Bundjalung Tribal Language Boundary Map
(Sourced from Arakwal People of Byron Bay website http://arakwal.com.au/)



had named his homestead and farm after his wife Annie Alston[13].

It has been considered that the original Duck Creek Mountain Village was located on the crest of Perrys Hill and was relocated in the early 1900s following the growth of Alstonville[14].

A suggestion made by an Alstonville local, as part of Council's pre – study community consultation in early 2016, was that consideration should be given to changing the name of Alstonville back to Duck Creek Mountain.

13 See www.aussietowns.com.au/town/alstonville#

14 Draft Shire Wide Community Based Heritage Study: The Hills Looking Down to the Sea: Thematic History of Ballina Shire , 2008, page 84

1.7 Heritage – the built and natural environment

Gardiner and Knox state that few buildings and structures on the Alstonville Plateau are older than 100 years. This they contribute to the buildings being constructed of timber which is particularly susceptible to fire and decay[15]. There do, however, remain a number of locally significant buildings as listed within Ballina LEPs 1987 and 2012.

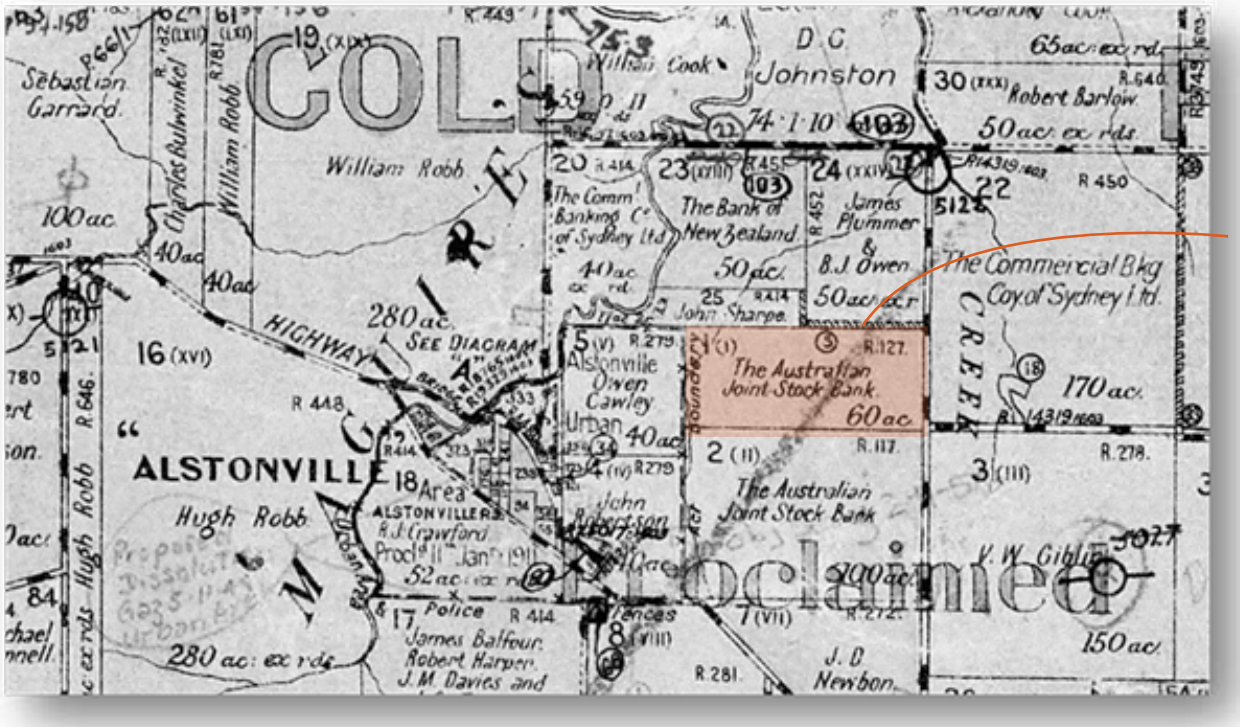
Ballina Local Environmental Plan 1987

Ballina Local Environmental Plan 1987 (BLEP 1987) no longer applies to the residential areas which comprise Alstonville 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 9 items of the built environmental heritage items located in Alstonville as detailed in Table 2.

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

Diagram 7: Extract from Tuckombil Parish Map



Portion 1 shown as 60 acre parcel with notation 'The Australian Joint Stock Bank'

Table 2: Ballina LEP 1987 Listed Alstonville Environmental Heritage Items

NAME	LOCATION
Federal Hotel	Main Street, Alstonville
Post Office	Main Street, Alstonville
Former CBC Bank	Main Street, Alstonville
Anglican Church	The Avenue, Alstonville
Cemetery	Alstonville
Police Station	Main Street, Alstonville
Peanut Factory	Bruxner Highway, Alstonville
Old Tintenbar Shire Council Chambers	Corner Bruxner Highway and High Street, Alstonville
Crawford House	10 Wardell Road, Alstonville

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 Alstonville, were identified. Many of these items were incorporated within Ballina LEP 2012. Schedule 5 of BLEP 2012 lists 26 items of Alstonville's built environment as detailed within Table 3.

There also exist additional items of Alstonville's built environment that have been assessed as having local heritage value but have not yet been listed within BLEP 2012. This is because the listing of items within the LEP has been dependent on obtaining agreement from property owners. 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.

Map 2 shows the location of items of the built environmental heritage located in Alstonville as listed in Ballina LEP 2012.

Map 2: Location Map Ballina LEP 2012 Heritage Items

1. *Federal Hotel*
2. *Former Post Office*
3. *Former CBC Bank*
4. *St Bartholomew's Anglican Church (stone)*
5. *Police Station*
6. *Former Butter/Norco/Peanut Factory*
7. *Former Tintenbar Shire Council Chambers*
8. *Federation house known as 'Crawford House' (formerly Olivene)*
9. *Memorial to First Settlers*
10. *Federation cottage known as 'Severn Lodge'*
11. *Saw Miller's Cottage*
12. *Former St Andrew's Presbyterian Church*
13. *Alstonville Show Ground Memorial Gates*
14. *RSL Sub Branch Hall (including collection of moveable heritage items)*
15. *Federation House known as 'Bellington' (1910)*
16. *Bulwinkle Park and Pool*
17. *Historic Mile Marker*
18. *Paddy Bugden Memorial*
19. *Alstonville Tropical Fruit Research Station*
20. *Elizabeth Ann Brown Park*
21. *Late Victorian House*
22. *St Bartholomew's Anglican Church (timber)*
23. *St Bartholomew's Anglican Church Manse*
24. *Cemetery*
25. *Croquet Clubhouse*

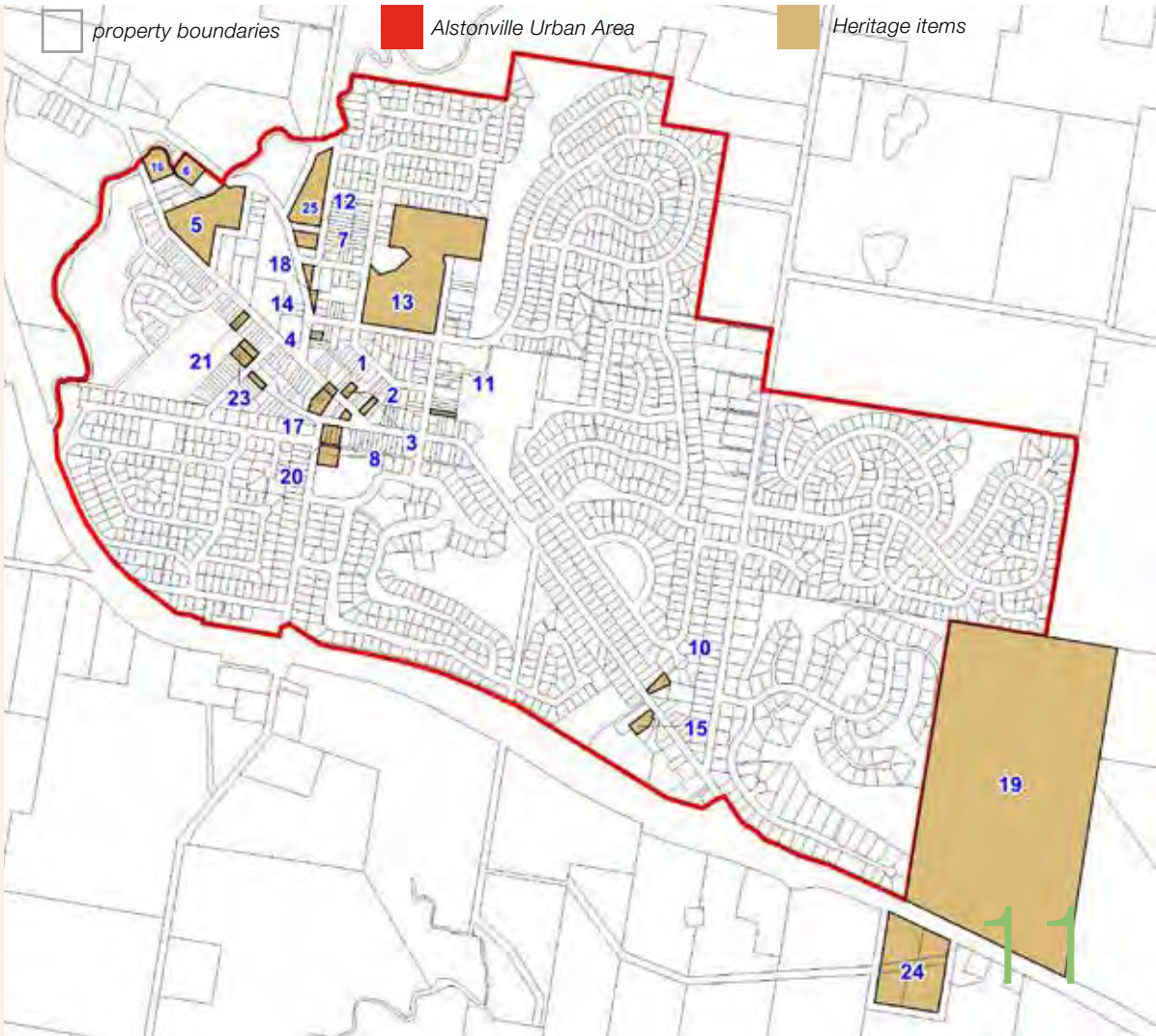


Table 3: BLEP 2012 Listed Alstonville Environmental Heritage Items

ITEM NAME	ADDRESS	PROPERTY DESCRIPTION
Federation cottage known as "Severn Lodge"	184 Ballina Road	Lot 3 DP 579040
Federation house known as "Bellington" (1910)	191 Ballina Road	Lot 71 DP 877648
Alstonville Tropical Fruit Research Station	Bruxner Highway	Lot 1 DP 806001
Bulwinkel Park and Pool	Bruxner Highway	Lot 332 DP 755745
Cemetery	Bruxner Highway	Lots 1 and 2 DP 123576; Lots 377 and 378 DP 729097 and adjacent unformed road
Former Tintenbar Shire Council Chambers	corner Bruxner Highway and High Street	Lot 321 DP 755745
Paddy Bugden Memorial	Bugden Avenue	Bugden Avenue road reserve adjacent to former Tintenbar Council Chambers building
Former St Andrew's Presbyterian Church	Bugden Avenue	Lot 256 DP 755745
RSL Sub Branch Hall (including collection of moveable heritage items housed in hall)	13 Bugden Avenue	Lot 2 Section 1 DP 1315
Alstonville Show Ground Memorial Gates	22–40 Commercial Road	Lot 2 DP 1031929
Memorial to first settlers	corner Daley and Main Streets	Lot 1 DP 133854
Elizabeth Ann Brown Park	Daley Street	Lots 1–4 DP 6383
Saw Miller's Cottage	3 Green Street	Lot 8 Section 2 DP 1315
Former Butter /Norco/Peanut Factory	5 Lismore Road	Lot 2 DP 635237
Collection of buggies, wagons and other farming implements	Lumley Park, Pearces Creek Road	Lot 333 DP 755745
Croquet Clubhouse	Lumley Park, Pearces Creek Road	Part of Lot 333 DP 755745
Historic Mile Marker (concrete)	Main Street	Main Street road reserve directly in front of Federal Hotel
Late Victorian house	49 Main Street	Lots 9 and 10 Section 1 DP 4536
Federal Hotel	77 Main Street	Lot 2 DP 851355
Former Post Office	86 Main Street	Lot 1 DP 873998
Former CBC Bank	92A Main Street	Lot 2 DP 700877
Police Station	2 Perry Street	Lot 323 DP 755745
St Bartholomew's Anglican Church (timber)	1 The Avenue	Lot 1 DP 1152916
St Bartholomew's Anglican Church Manse	3 The Avenue	Lots 39–41 Section 1 DP 4536
St Bartholomew's Anglican Church (stone)	6 The Avenue	Lot 1 DP 939215
Federation house known as "Crawford House" (formerly "Olivene")	10 Wardell Road	Lot 6 DP 235088

Ballina Shire Development Control Plan 2012 (BSDCP 2012)

BSDCP 2012 contains specific provisions relating to commercial development proposed for Alstonville. Commercial development is permitted within the B2 Local Centre zone located within Alstonville Village. The land zoning plan for Alstonville Village (Map 1) shows the extent of the B2 zone at Alstonville.

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

> "ensuring compatibility of new development with the character of the village centre in terms of land use, design and external appearance; particularly having regard for identified buildings of cultural and historic significance"

Chapter 6b lists the aspects that contribute to the village centre of Alstonville which have been identified as being special and contribute to a strong sense of place. These aspects have been described as:

- its built heritage and the presence of a number of older timber buildings which significantly contribute to the village streetscape
- its compact and enclosed layout providing a user friendly environment
- its small buildings and modest architecture and its residential scale
- the influence of well established parks and street trees throughout the area
- its links with and proximity to Lumley Park and Bulwinkel Park and other places of community, cultural and recreational interest
- its setting within a post-European rural landscape
- it is a good example, on the North Coast, of a rural village that has retained elements of the built and landscaped environment which demonstrate its beginnings, growth and change.

Federal Hotel, Main Street, Alstonville

Specific development controls have been incorporated within Chapter 6b which seek to ensure that new development is in context with existing development and reflects the strong heritage values associated with Alstonville. These controls include ones designed to encourage greater use of timber as a building material and discouragement of large scale building development.

Chapter 6b of BSDCP 2012 - Commercial Development Alstonville replaced DCP No 6 – Alstonville Village Centre Enhancement. DCP No 6 was first introduced in July 1999. It sought to facilitate future development within the village centre with particular emphasis on ensuring compatibility of new development with the character of the village centre. It considered issues such as land use, design and external appearance particularly having regard to buildings of cultural and historic significance[16].

The Alstonville community continues to value its historic past and the manner in which development within the Alstonville village centre recognises and is in context with the character and sense of place provided by buildings which occupy the village centre. The provisions of Council's DCPs have since 1999 assisted in meeting these objectives.

16 Ballina Retail Strategy, August 2003, p 9

CHAPTER 2 ENVIRONMENTAL CHARACTERISTICS OF ALSTONVILLE

The urban areas of Alstonville are surrounded by land assessed as having primarily Local Biodiversity Significance in mapping undertaken by 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 the reason for this land being assigned a Local significance value[17].

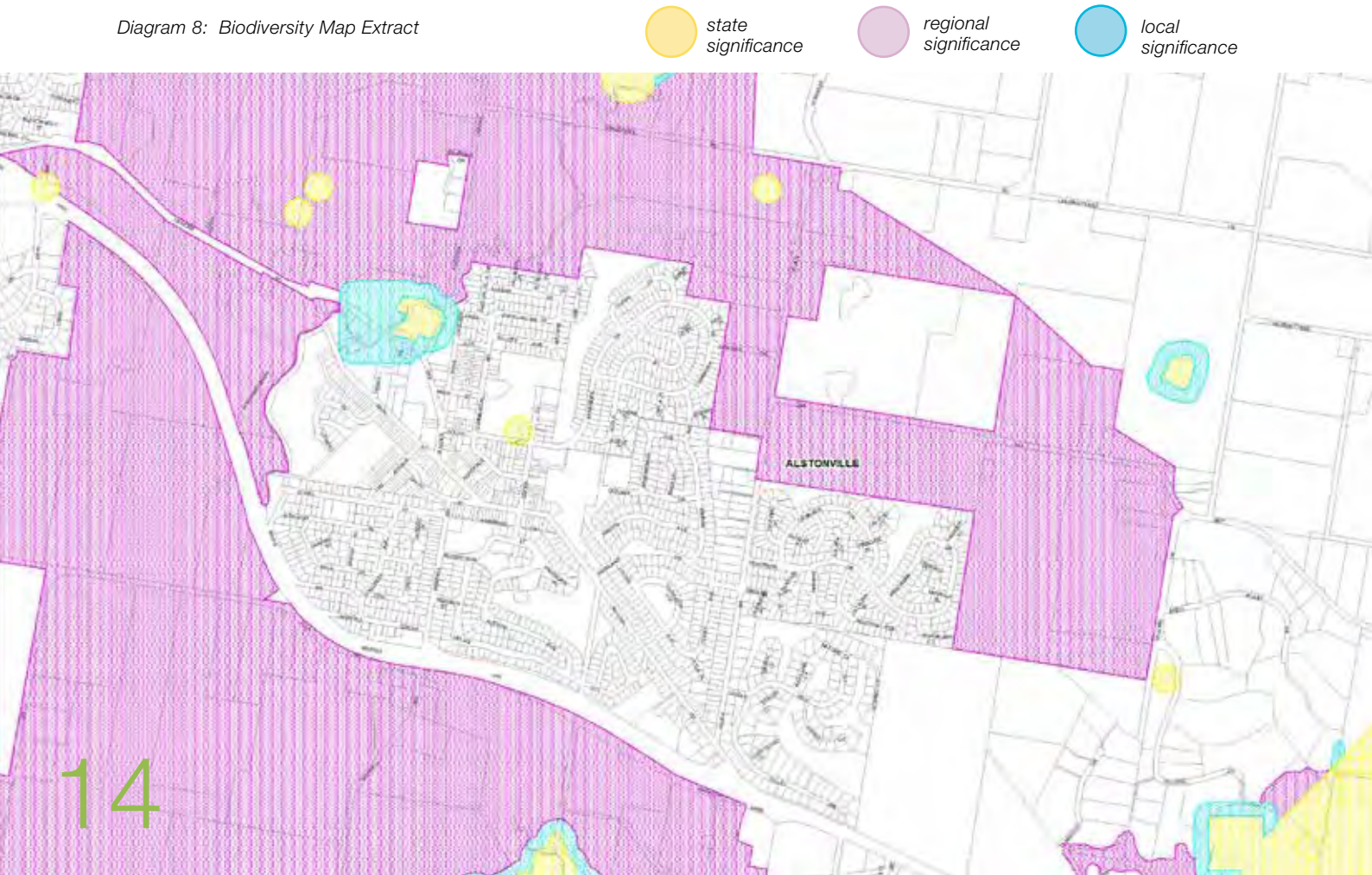
17 Refer dataset identification criteria in DECC (NSW) 2008 Targeted Vegetation Survey of Floodplains and Lower Slopes on The Far North Coast, pp 21- 22

Located within these locally significant areas are biodiversity hotspots assigned Regional and State biodiversity significance. These areas which include Lumley Park 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[18].

An extract of the Biodiversity Map for Alstonville is contained in Diagram 8.

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

Diagram 8: Biodiversity Map Extract



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.

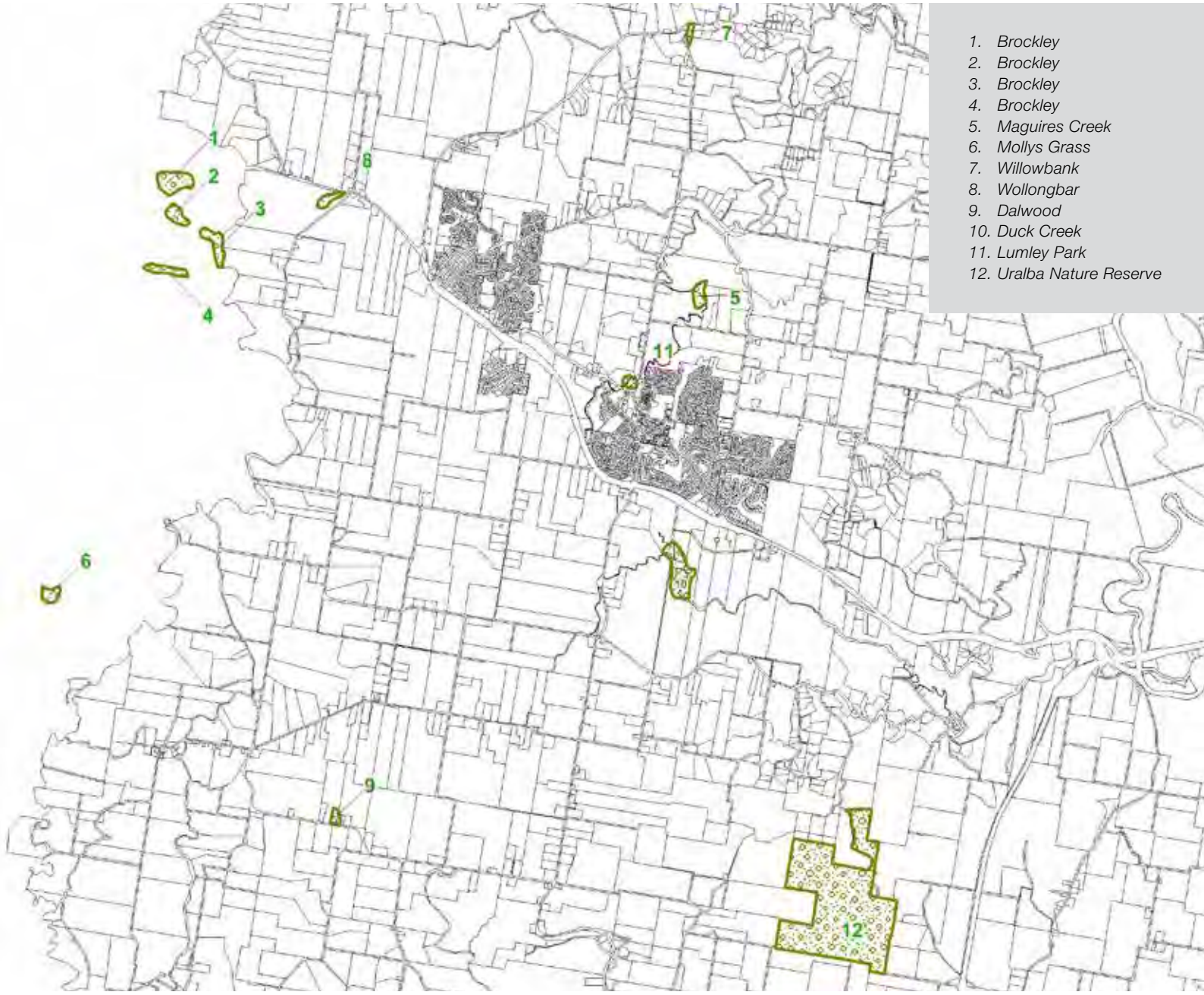
Map 3 shows the location of natural areas listed within the Australian Heritage Database. These areas are of significant value to the localities of Alstonville and Wollongbar and the broader Ballina Shire.

Alstonville's rural hinterland

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

BROCKLEY SCRUB NO 1 Bruxner Hwy about 15 ha, 3 km west-north-west of Wollongbar	Wollongbar NSW Australia	(Interim List) Register of the National Estate (Non-statutory archive)
BROCKLEY SCRUB NO 2 Bruxner Hwy about 8 ha, 2.5 km west of Wollongbar	Wollongbar NSW Australia	(Interim List) Register of the National Estate (Non-statutory archive)
BROCKLEY SCRUB NO 3 Bruxner Hwy About 6 ha, 3 km west of Wollongbar.	Wollongbar NSW Australia	(Interim List) Register of the National Estate (Non-statutory archive)
DALWOOD SCRUB TREGEAGLE Meerschaum Vale Rd about 1.25 ha, 6.5 km south-west of Alstonville, comprising Council Reserve Lot 11 DP248855	Alstonville NSW Australia	(Interim List) Register of the National Estate (Non-statutory archive)
DUCK CREEK SCRUB about 30 ha, 1.5km south-south-east of Alstonville	Alstonville NSW Australia	(Registered) Register of the National Estate (Non-statutory archive)
DUCK CREEK SCRUB EXTENDED AREA about 4 ha, 1.5 km south south east of Alstonville	Alstonville NSW Australia	(Registered) Register of the National Estate (Non-statutory archive)
LUMLEY PARK SCRUB Bugden Ave about 2.5ha, in Alstonville	Alstonville NSW Australia	(Interim List) Register of the 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)

Map 3: Register of National Estate - Big Scrub remnant



1. *Brockley*
2. *Brockley*
3. *Brockley*
4. *Brockley*
5. *Maguires Creek*
6. *Mollys Grass*
7. *Willowbank*
8. *Wollongbar*
9. *Dalwood*
10. *Duck Creek*
11. *Lumley Park*
12. *Uralba Nature Reserve*

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 Alstonville township and nearby areas. The search was undertaken within a 10km by 10km area which incorporated Alstonville and Wollongbar [Reference Co-Ordinates -28.78 North, 153.39 West, 153.49 East and -28.88 South].

The data base searches are detailed in the sections below.

2.2.1 Fauna

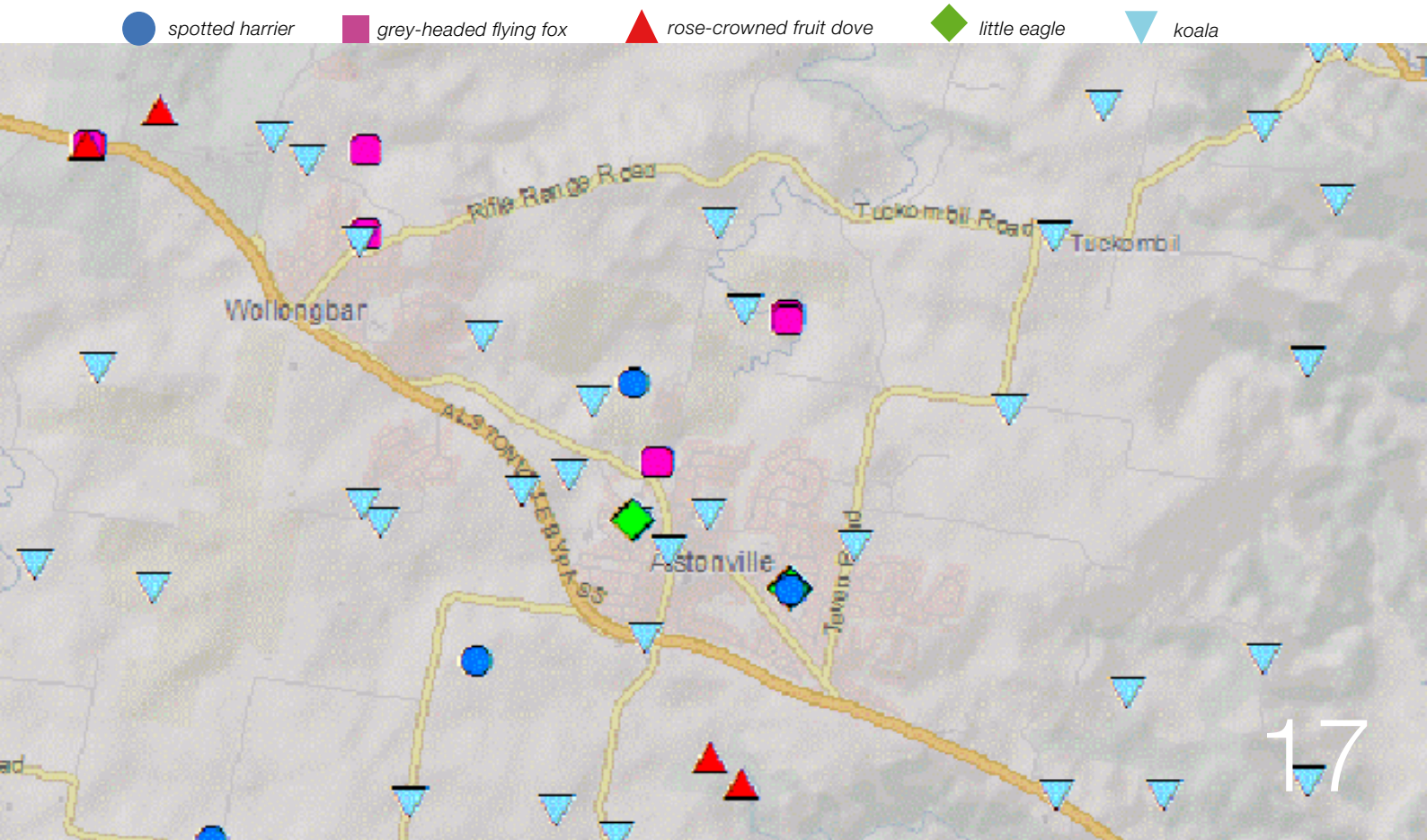
The search found 310 records of 46 species of Threatened (listed in the TSC Act 1995 or EPBC Act 1999) listed animal species in the search area as indicated in the Table 5 contained within Annexure 2. The top five recorded animal species appears in Table 5 (3 birds and 2 mammals).

The map below has been extracted from the NSW Wildlife Atlas and shows graphically the location of the five animal species contained within Table 5 above in close proximity to Alstonville township. Alstonville is also the northern boundary of a nationally significant koala population (Ballina Koala Habitat Study 2015).

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

SPECIES	STATUS (NSW TSC ACT 1995)	NUMBER OF RECORDS
Phascolarctos cinereus (Koala)	Vulnerable	99
Pteropus poliocephalus (Grey-headed Flying-fox)	Vulnerable	20
Ptilinopus regina (Rose-crowned Fruit-Dove))	Vulnerable	15
Circus assimilis (Spotted Harrier)	Vulnerable	10
Hieraaetus morphnoides (Little Eagle)	Vulnerable	6

Diagram 9: Extract from NSW Wildlife Atlas Showing Location of Selected Animal Species in close proximity to Alstonville Village



2.2.2 Flora

The search found 127 records of 23 species of threatened listed plant species, listed in the NSW State Threatened Species Conservation Act (TSC Act 1995) or the Federal Environment Protection and Biodiversity Conservation Act (EPBC Act 1999), in the search area as indicated below.

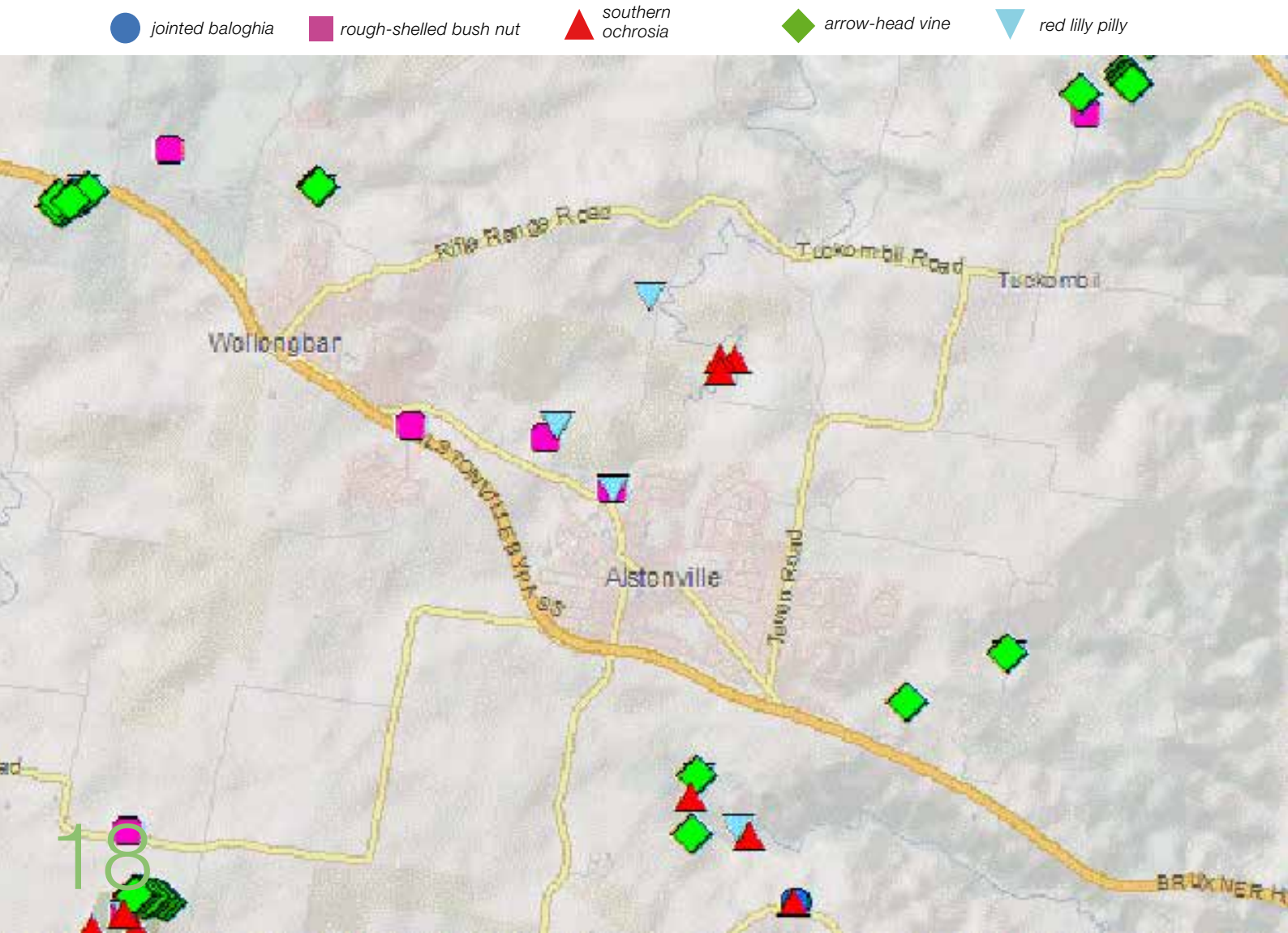
Annexure 2 contains details of the Threatened species and the number of records found within the broader Alstonville – Wollongbar localities. The top 5 recorded plant species are detailed in Table 6.

The diagram below has been extracted from the NSW Wildlife Atlas and shows graphically the location of the top 5 five plant species in closest proximity to Alstonville township.

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

PLANT SPECIES	STATUS (NSW TSC ACT 1995)	NUMBER OF RECORDS
Tinospora tinosporoides (Arrow–head Vine)	Vulnerable	46
Syzygium hodgkinsoniae (Red Lilly Pilly)	Vulnerable	18
Macadamia tetraphylla (Rough-shelled Bush Nut)	Vulnerable	12
Ochrosia moorei (Southern Ochrosia)	Endangered	9
Baloghia marmorata (Jointed Baloghia)	Vulnerable	6

Diagram 10: Extract from NSW Wildlife Atlas showing location of selected plant species



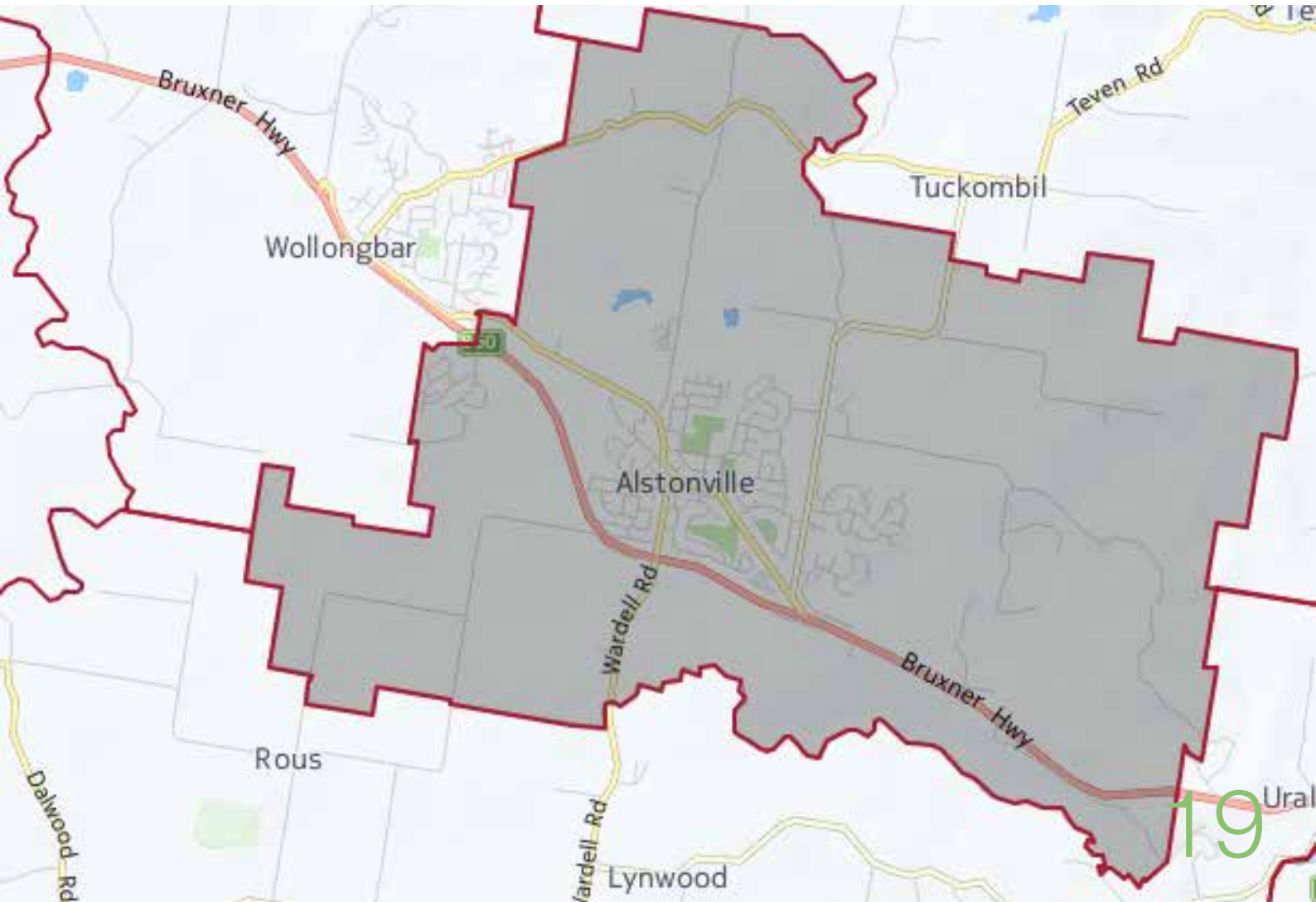
CHAPTER 3 DEMOGRAPHIC CHARACTERISTICS

3.1 Geographical boundaries of Alstonville

For the purpose of the analysis contained in Chapter 3, Forcast.id enumerated data has been used to provide information about the 2001, 2006 and 2011 census periods. This data relates to the area shown on Diagram 11. The boundaries reflect the State Suburb boundaries (SSC) as used by the Australian Bureau of Statistics for the 2011 Census.

Rural area, Pearces Creek Road, Alstonville

Diagram 11: Geographical boundaries of Alstonville – census data area



3.2 Demographic profile

Table 7 below presents a summary of key census data for 2011 and how this compares with 2001 and Ballina Shire. 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 – Alstonville and Ballina Shire

CHARACTERISTIC	ALSTONVILLE 2011 (BALLINA SHIRE)	ALSTONVILLE 2001 (BALLINA SHIRE)
Population (usual resident)	5606 +7.3% (+7.2%)	5226
Population over 15	83% (82%)	80.9% (79.9%)
Elderly (85+)	6% (3.6%)	3% (2.1%)
Number of dwellings	2507	2341
Additional dwellings	+166 or 7% since 2001	N/A
Dwelling structure separate house	74.9% (68.5%)	74.6% (66%)
Dwelling Structure Medium Density	19.8% (25.7%)	22.6% (26.7%)
Average Household Size	2.31 (2.35)	2.37 (2.43)
Housing Tenure – Fully owned	46.0% (39.4%)	54.3% (44.8%)
Housing Tenure – Mortgage	26.9% (25.75)	19.5% (19.8%)
Housing Tenure – Renting	22.5% (28.6 %)	21.8% (29.6%)
Household Type – Lone person	29.4% (26.1%)	28.8% (25.3%)
Household Type – Couples no children	31.2% (29.4%)	31.3% (29%)
Car Ownership – no car	7.1% (7.4%)	10.7% (10.2%)
Car Ownership – one car	41.2% (38.7%)	48.3% (45.6%)
Car Ownership – two cars	34.8% (35.5%)	29.4% (30.3%)
Car Ownership – three or more cars	12.9% (13.1%)	7.7% (8.6%)
Method of Travel to Work – car as driver	70.2% (65.4%)	65.5% (59.7%)
Need for assistance with core activities	6.7% (5.8%)	N/A
Employed	96.2% (93.7%)	91.5% (89.8%)
Unemployed	3.8% (6.3%)	8.5% (10.2%)
Labour force participation rate	50.3% (54.9%)	N/A

3.3 Population growth, household size and housing supply

In the 10 year period to 2011 Alstonville's population increased by approximately 7% as did the number of new dwellings. Housing supply is therefore at a high level relative to increases in population. This has resulted in relative stability within the housing market and may have contributed to Alstonville experiencing less price pressure than some other localities, as is evidenced by data contained within Table 8.

The increase in dwellings (165) and increase in population (380) would suggest that many new households contained fewer residents. This assumption is supported by the graph in Diagram 12.

In terms of average household size, this was estimated as 2.37 persons per household in 2001 and reduced to approximately 2.30 persons in 2011. It is forecast to reduce slightly to 2.28 persons by 2036. From a planning perspective, if the average household size is falling then there may also be an increased demand for dwellings to support these smaller households[19].

19 Refer data and comments in Alstonville Population and Household Forecasts 2011 – 2036, .id, p10

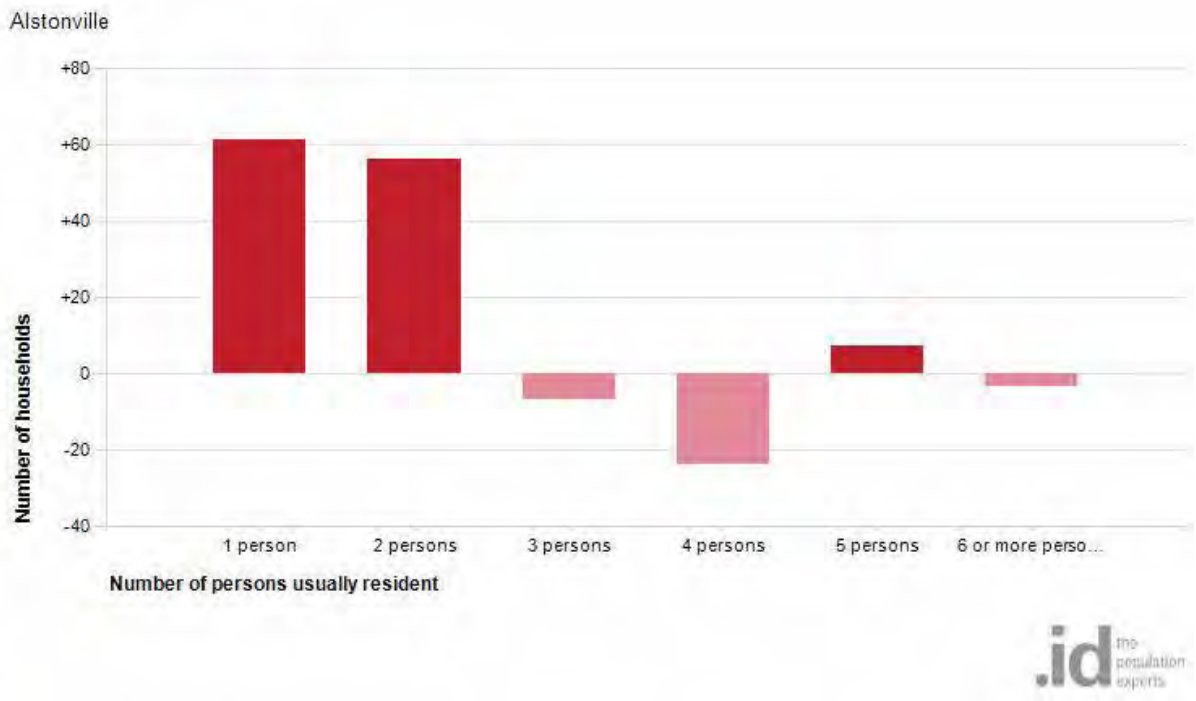
In Alstonville's case dwelling occupancy shows little movement therefore there is likely to be a lower level of demand for additional dwellings from Alstonville residents. That is not to say there will not be demand generated by people wanting to move to Alstonville.

Table 8: Median house price movements September 2015 to September 2016[20]

LOCALITY	% CHANGE
Alstonville	5%
Wollongbar	8%
Cumbalum	9%
Lennox Head	9%
Ballina	10%
East Ballina	14%
West Ballina	17%
Wardell	20%

20 Information obtained from **www.house.ksou.cn**

Diagram 12: Change in household size 2001 to 2011



An increase in 1 and 2 person households may be an indicator of increased demand for smaller dwellings containing 1 and 2 bedrooms. The data, however, indicates that in the 10 years to 2011 a reduction in 1 and 2 bedroom dwellings occurred and an increase in 3, 4 and 5 or more bedroom dwellings resulted as indicated in Diagram 13.

The change in the number of bedrooms per dwelling data may be interpreted as suggesting that the market is not meeting local demand or alternatively that new dwelling builders are constructing buildings larger than required by the initial occupants. If the later assumption is correct it may have implications which include the following:

- dwelling stock not meeting needs of current occupiers
- increased rent and home purchase costs
- lack of capacity to downsize within local area.

Anecdotal evidence, obtained through resident and real estate agent interviews, would suggest that there is unmet demand for dwellings on smaller lots, closer to the town centre, but not necessarily smaller dwellings.

The more significant changes in Alstonville's age structure, between 2001 and 2011, were in the following age groups:

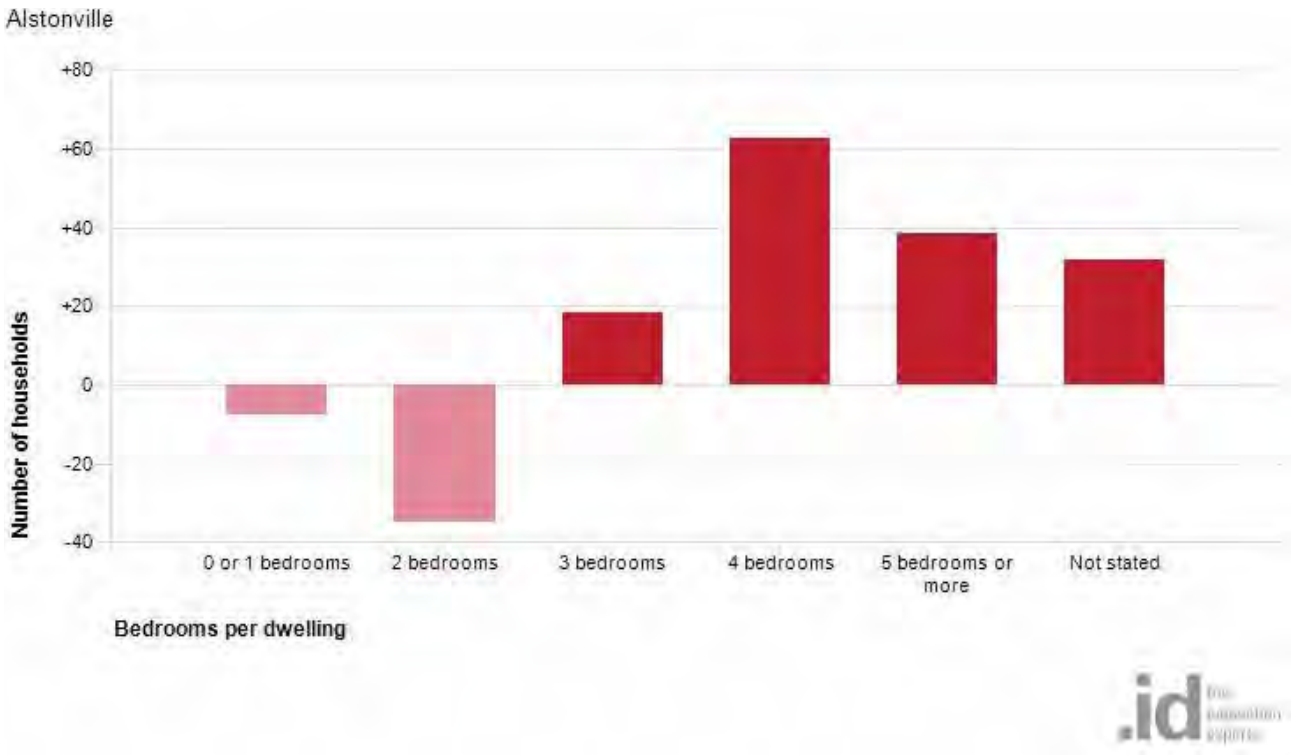
- babies and pre-schoolers (0 – 4) (+43 people)
- empty nesters and retirees (60 to 69) (+215 people)
- elderly aged (85 and over) (+180 people)
- older workers and pre-retirees (50 to 59) (+108 people)
- parents and homebuilders (35 to 49) (-92 people)

The age structure changes are shown graphically in Diagram 14.

Analysis of the service age groups contained within Alstonville in 2011, compared to Ballina Shire, shows that there was a lower proportion of people in the younger age groups (0 to 17 years) and a higher proportion of people in the older age groups (60+ years).

Overall 20.7% of the population was aged between 0 and 17, and 34.5% were aged 60 years and over, compared with 21.9% and 28.8% respectively for Ballina Shire.

Diagram 13: Change in bedrooms per dwelling, 2001 to 2011



It has been estimated that by 2036 the proportion of the population aged 60+ years will have increased to 37%. This indicates that retirement and aged care will still be in significant demand over the next 20 year period. Beyond that time there may be a decline in the 60+ age group. This is because forecast estimates, for the 50 to 64+ age categories in 2036, indicate that they will comprise 16% of the population compared to 20% in 2011[21].

It is noted that both the Adventist and the Baptist Care Retirement Villages have significant expansion plans to meet the demand for additional retirement and aged care accommodation. This issue is discussed in greater detail in Section 3.4 and Chapter 6.

21 Alstonville Population and Household Forecasts 2011 – 2036, .id, p15

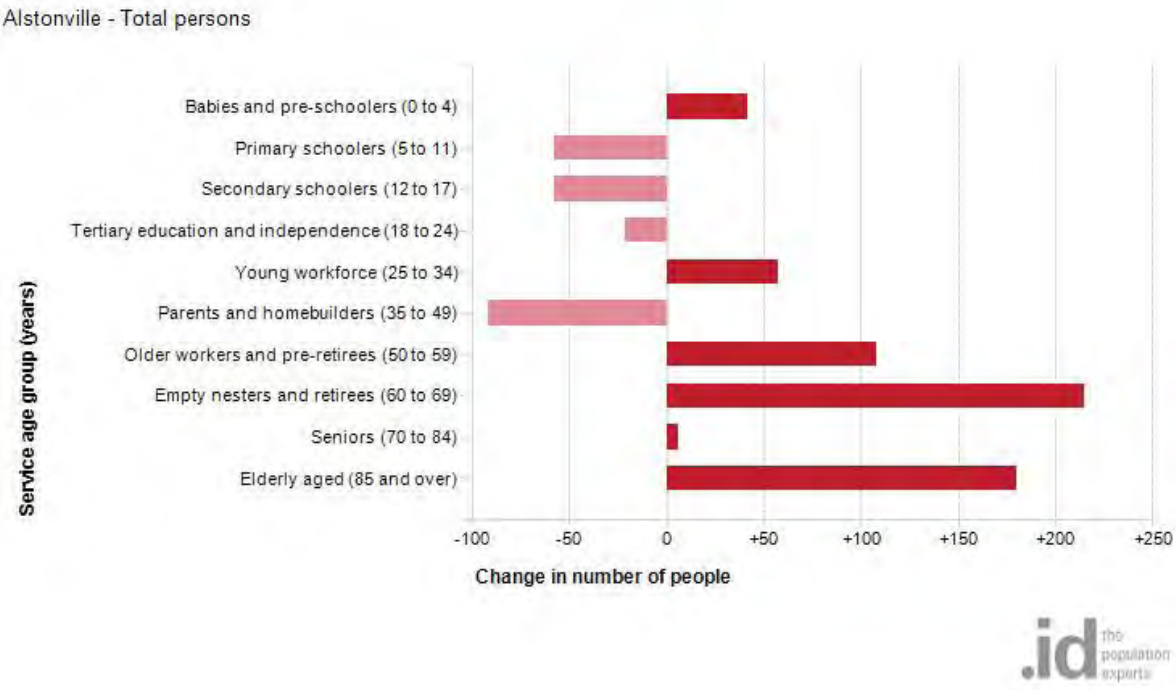
3.4 Retirement and aged care accommodation

One reason for the higher number of older age groups in Alstonville may relate to the number of retirement village residents living in this area. Table 9 provides details of the location of retirement villages and the nature of accommodation currently provided and proposed.

A strategic action contained within the 2012 Ballina Shire Growth Management Strategy (2012 BSGMS) related to the identification of additional opportunities for seniors living facilities at Alstonville.

Mr Mike Furner, Baptist Care General Manager Housing, advised in November 2016 that Baptist Care had a 20 year plan to provide additional housing on their The Avenue site. A development application is anticipated to be lodged in December 2016 or January 2017 for the staged redevelopment of their site. The proposal will include a significant increase in the number of self-care units in the two to three bedroom category plus garage. This is in response to local demand for larger retirement accommodation.

Diagram 14: Change in age structure – service age groups, 2001 – 2011



A development application (DA2016/704) was lodged on 6 December 2017 for stage one of a six stage redevelopment of the Maranoa Village. Stage one consists of the construction of 12 self-contained dwellings, associated tree removal and new internal roads. Stage one works have a construction value of approximately $3 million with the total redevelopment being valued in excess of $31 million.

Mr Paul Mitchell, General Manager, Adventist Retirement Village, was interviewed in November 2016. He advised that there is strong local demand for seniors accommodation in Alstonville with 76 local people on the self-care unit waiting list. In terms of the 84 self-care units currently constructed, these provide housing for 125 people. He indicated that the village was still keen to pursue an expansion to the south onto 45 Pearces Creek Road.

In 2005 the Council declined a request to rezone approximately 4 hectares of land on the southern side of the Adventist Retirement Village, and additional land to the west of the village[22]. The southern expansion was proposed to facilitate the construction of an additional 56 self-care units whereas the westerly expansion was to enable construction of 24 car parking spaces.

Council's reasons for not supporting the 2005 rezoning proposal can be summarised as relating to concerns that the proposed "spot – rezoning" conflicted with its identified Urban Land Release Strategy for the Alstonville Plateau. That strategy identified the short to medium term approach as consisting of a no expansion policy for Alstonville, medium term land releases for Wollongbar, and the discouragement of edge rezonings in the localities of Alstonville and Wollongbar. Council also noted the land's State Significant Farmland designation and the then inconsistency with a Section 117 Ministerial Direction, relating to agricultural land, as reasons for declining to support the proposed rezoning.

22 Ordinary Meeting of Ballina Shire Council held on 24 March 2005 [Minute No. 240305/013]

Diagram 15: Extract from 2005 Adventist Village rezoning submission

Note: This site plan relates to the 2005 rezoning proposal. The Urban Expansion Evaluation Area discussed in Chapter 6 occupies an area of approximately 1/3rd of that proposed for rezoning in 2005.
Plan prepared by N.G. Sanders & Associates Pty Ltd Architects and Town Planners

In the context of the 2012 BSGMS having a strategic objective to 'Identify opportunities for additional seniors living facilities,' opportunities available to facilitate an expansion of the Adventist Retirement Village have been considered in greater detail in Chapter 6.

Table 9: Alstonville Retirement and Aged Care Villages

NAME AND LOCATION	ACCOMMODATION PROVIDED	ACCOMMODATION PROPOSED
BAPTIST CARE MARANOA VILLAGE 15 The Avenue, Alstonville	13 x 1 bedroom units 15 x 2 bedroom units 45 bed hostel 40 bed nursing home 127 residents	demolition of existing units and hostel construction of 72 self-care units and 90 bed residential aged care facilities, in six stages see proposed site master plan in diagram 8
ADVENTIST SENIOR LIVING 77 Pearces Creek Road, Alstonville	84 villas (one, two and three bedrooms) independent living units 125 residents	current specific details not available
ADVENTIST SENIOR LIVING AGED CARE FACILITY 77 Pearces Creek Road, Alstonville	51 medium care beds 51 residents	current specific details not available

Baptist Care, The Avenue, Alstonville

3.5 Population change 2001 – 2036

Table 10 below provides details of the number of people living in Alstonville in previous census periods (place of usual residence) as well as projections made by Forecast.id (estimated residents) for 2016 and 2036.

Table 10: Alstonville population details and projection to 2036

YEAR	POPULATION	CHANGE
2001	5226	+7.27%
2006	5602	
2011	5606	
2016	5844	+5.54%
2036	6168	

The population forecast for 2036 is based on a low level of infill development (3-8 dwellings per annum) occurring and one more significant development at 209 Ballina Road, containing 19 dwellings, being completed. The average annual rate of growth for Alstonville has been calculated as +0.27% for the period 2016 to 2036.

Should these assumptions change through the creation of additional opportunities for new dwelling construction then the population forecast will require adjustment.

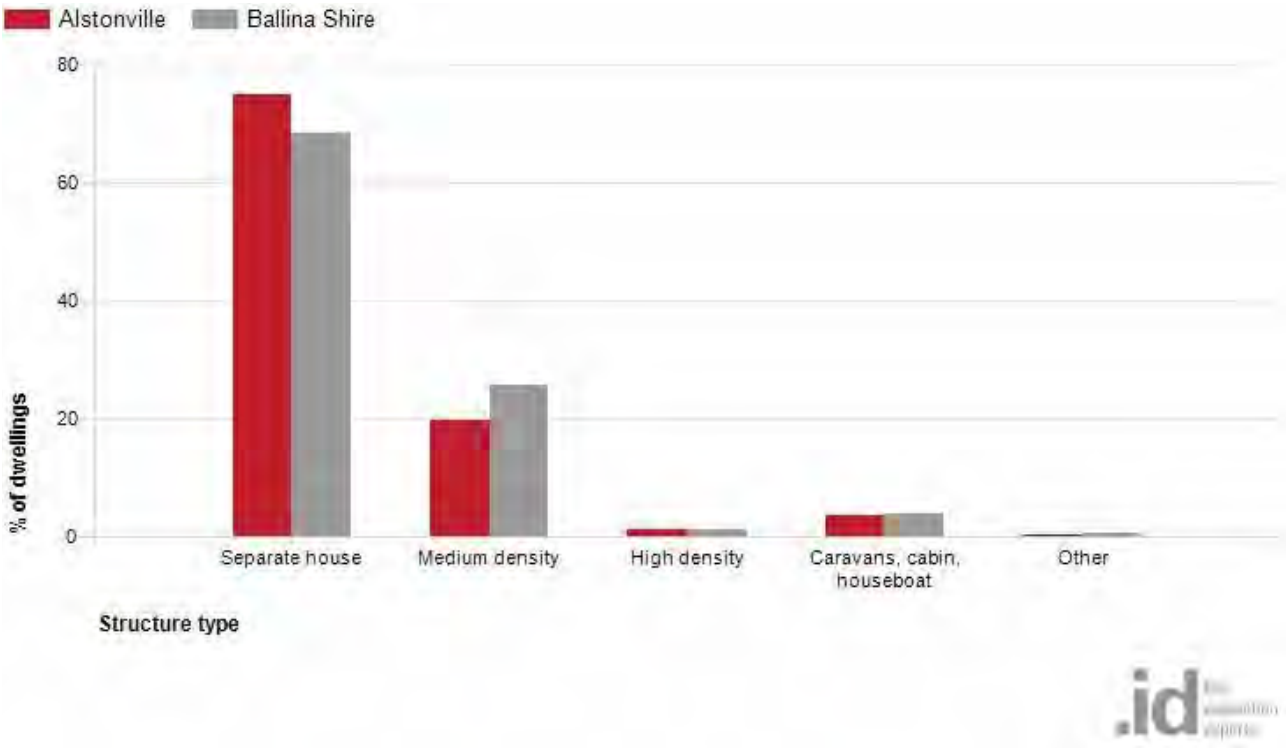
The full Population and Household Forecast Report 2011 to 2036 is contained within Appendix Two.

Chapter 6 examines a number of potential growth scenarios and the impact these are likely to have on population to 2036.

Planning implications – dwelling structure data

Housing diversity within a community provides opportunities for people to move between different dwelling types as their life needs change. Young

Diagram 16: Dwelling structure comparison – Alstonville and Ballina Shire 2011



adults may seek smaller dwellings, often in rental accommodation consisting of medium density housing types such as units, villas and townhouses. Young families may seek dwelling houses located on larger lots with garden and backyard space. Older people may seek to downsize into dwellings without significant yard areas.

Consultation with some older residents living in Alstonville has revealed that they consider that medium density housing options, closer to the town centre, are desirable but not available.

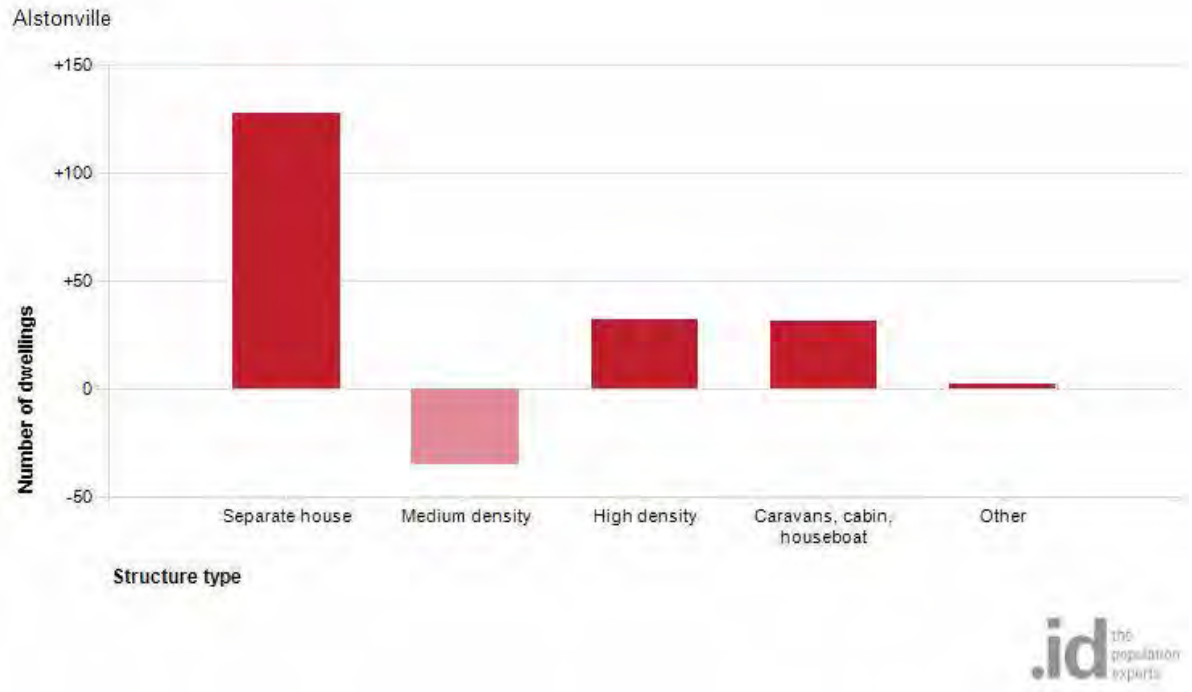
Diagram 16 provides dwelling structures information for Alstonville in 2011 and compares this information with Ballina Shire. The data indicates that approximately 75% of dwellings in Alstonville are separate houses and 20% are medium density housing forms.

The separate house category is higher than that for Ballina Shire (68.5%) and lower for medium density (25.7%). This is interpreted as residents living in some other parts of the shire having greater housing choice than is the case for Alstonville residents.

It is noted here that the Far North Coast Regional Strategy (FNCRS) set a density target for new housing development consisting of 40% multi-unit housing and 60% single dwellings. There is therefore an opportunity to increase the amount of multi-unit housing available to Alstonville residents without compromising the dwelling targets contained within the FNCRS.

Further analysis of dwelling structure changes in Alstonville, in the period 2001 to 2011, reveals that new housing within this period has been predominantly in the separate house category. Medium density housing forms appear to be in decline and higher density housing has increased. The changes in medium and high density housing may relate to confusion around what constitutes medium or high density housing given that there are no high density housing forms present in Alstonville. Diagram 17 shows graphically changes in dwelling structure that have occurred in Alstonville in the period 2001 to 2011.

Diagram 17: Changes in dwelling structure – Alstonville - 2001 to 2011



3.6 Housing tenure 2011

The analysis of housing tenure data indicates that more people own their homes in Alstonville (+6.6%) than the shire average. The number of persons owning their own homes without a mortgage has, however, declined in the period 2001 to 2011 (-8.3%) and that rate of decline has been greater than the rate across Ballina Shire (-5.4%). This may be an indicator of younger families moving to Alstonville and financing that move via mortgages.

The number of people renting has had a marginal increase in the period 2001 – 2011 (+0.7%) which is an indicator of relative stability within the home rental market. This is in contrast with the rate for Ballina Shire which has seen a 1% reduction in people renting.

The percentage of people renting in Alstonville in 2011 is significantly less (22.8%) than for Ballina Shire (29.2%). Information obtained from local real estate agents suggests that there is an acute shortage of rental accommodation in Alstonville.

Diagrams 18 and 19 contain housing tenure information for Alstonville extracted from the 2011 Census.

Aerial view - Alstonville residential areas 2013

Diagram 18: Alstonville Housing Tenure 2011

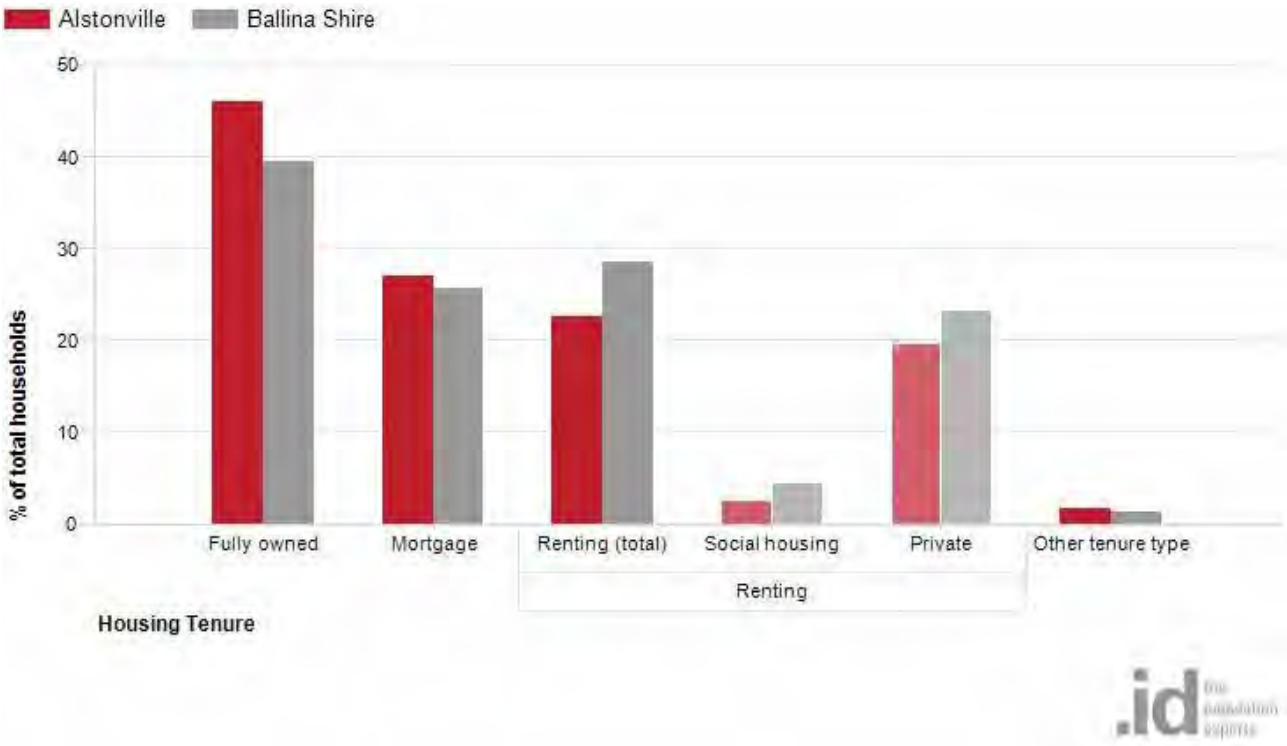
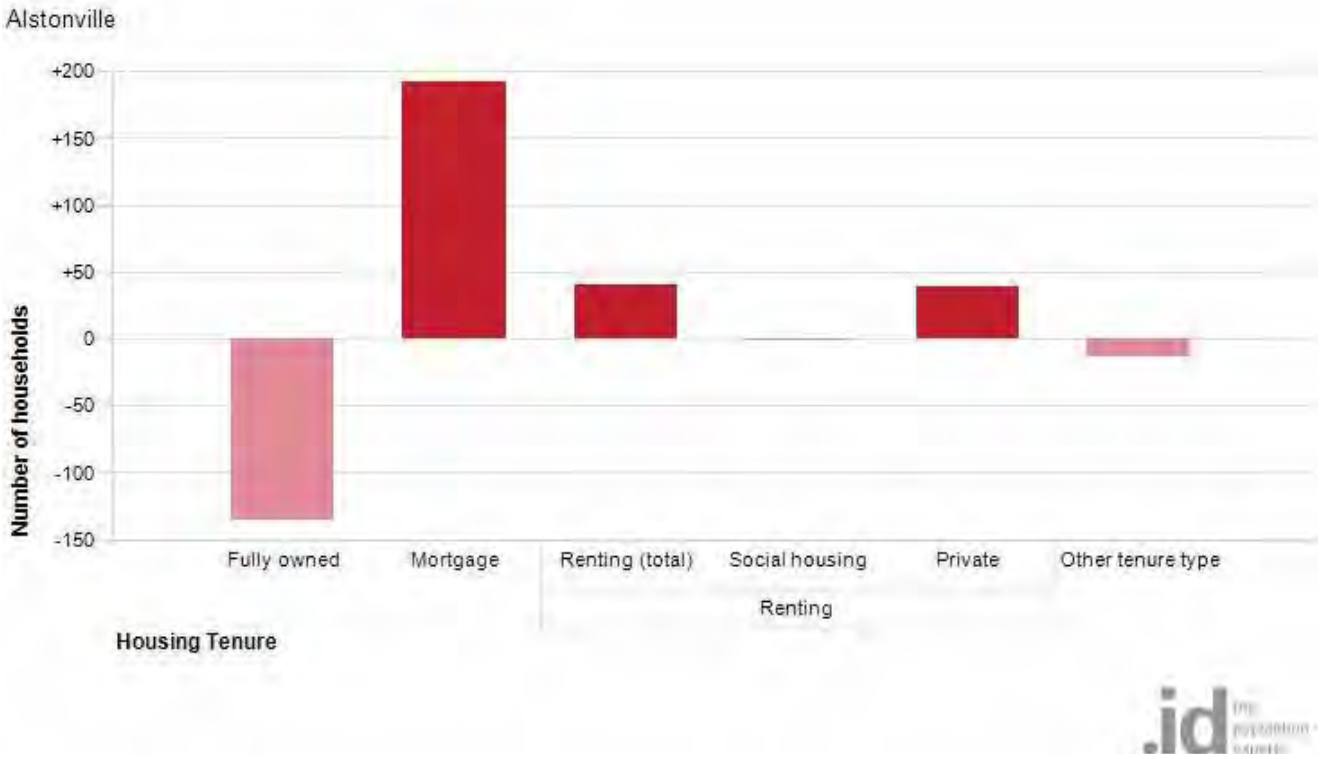


Diagram 19: Alstonville housing tenure changes 2001 to 2011



3.7 School enrolments 2006 to 2016

An analysis of NSW Government school February enrolment data relating to Alstonville Public School and Alstonville High Schools, for the period 2006 to 2016, has been undertaken. Table 11 contains enrolment data for the 2006 to 2016 periods.

The data contained within Table 11 is presented graphically in Diagram 20.

Table 11: Alstonville Public and High School enrolment data 2006 to 2016

YEAR	ALSTONVILLE PUBLIC SCHOOL	ALSTONVILLE HIGH SCHOOL
2006	493	963
2007	535	956
2008	540	969
2009	536	945
2010	561	909
2011	580	919
2012	549	887
2013	528	877
2014	554	855
2015	540	859
2016	531	805

The data indicates that Alstonville Public School enrolments have increased by 7.7% during the period 2006 to 2016 whereas the Alstonville High School enrolments have declined by 16.4%.

In the period 2006 to 2011, which corresponds with census periods, enrolments in Alstonville Public School increased from 493 to 580 students (+17.6%) and for Alstonville High School they declined from 963 to 919 students (-4.6%). Comparing school enrolments with census data for this period, for the 5 to 14 year age cohort, indicates that the number of children has declined by 56 children (-8.8%).

One conclusion that can be drawn from the data would be that Alstonville Public School attracts students from a broader area than covered by the census boundaries whereas Alstonville High School loses children to non-Government high schools within the broader region. This conclusion is reinforced by the information contained within Diagram 21.

Census data indicates that for the Alstonville population there were 62 fewer children attending the Government's primary school and 88 fewer children attending the Government's high school in 2011 compared to 2001.

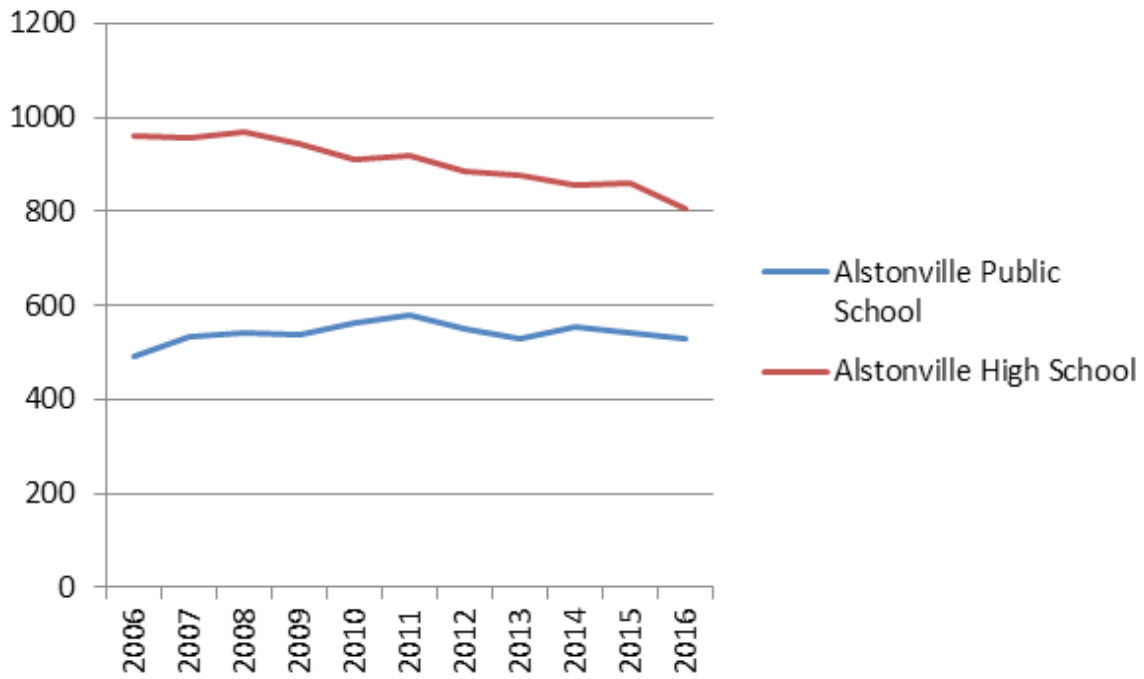
Alstonville Public School's enrolments have increased for part of the period 2001 to 2011 as shown in Table 11. This may suggest that the catchment for children attending this school may be broader than the Alstonville suburb boundaries or that there has been a shift of children from the Catholic to the government primary school. In respect to the later assumption it is noted that enrolments at St Joseph's Primary School have declined by approximately 21% (252 to 209 children) between 2010 and 2015[23] as indicated in Table 12.

Table 12: Alstonville St Joseph's Primary School enrolment data

YEAR	2010	2011	2014	2015
Children	252	254	200	209

23 Information contained in 2011 and 2015 St Joseph's Primary School Annual School Reports

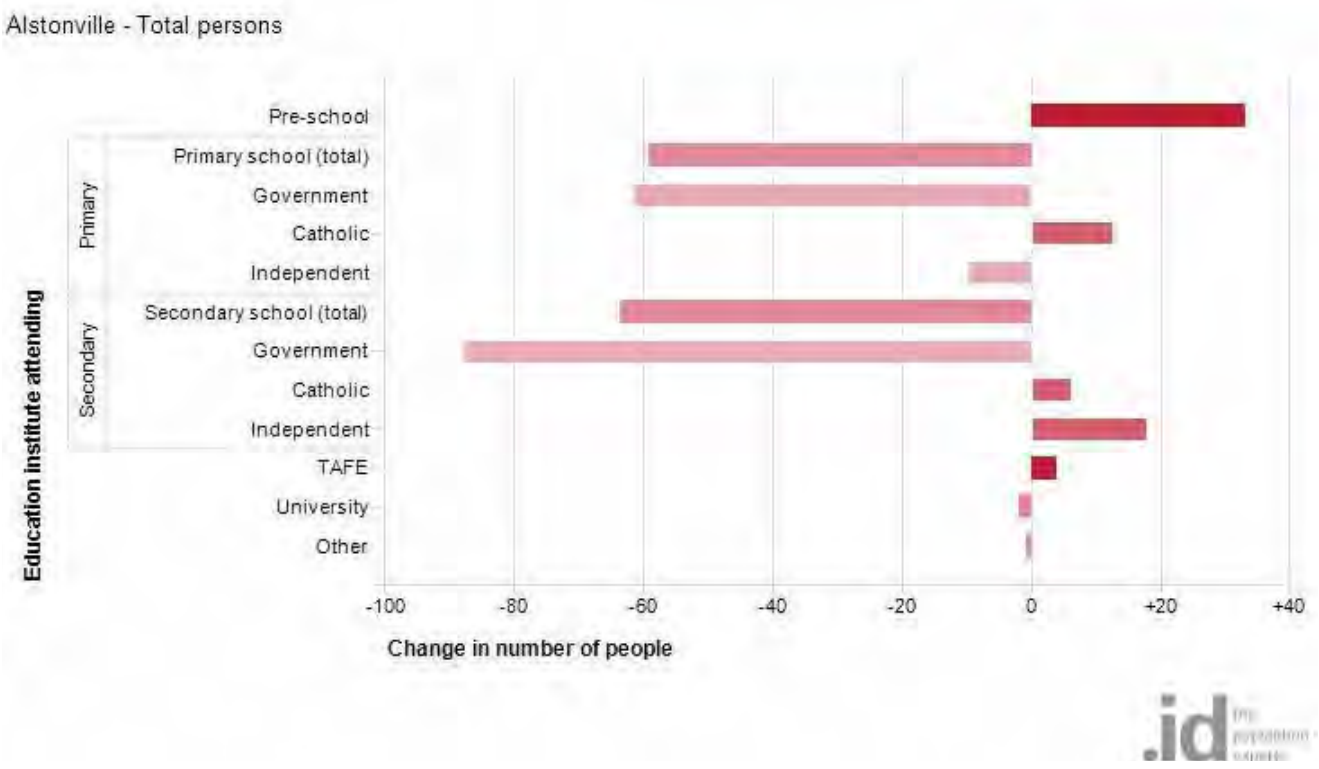
Diagram 20: Alstonville Public and High School enrolment data 2006 - 2016



The data also indicates that an increasing number of children are attending non-government secondary schools as indicated in Diagram 21. These secondary schools are all located outside the suburb boundaries of Alstonville.

The decline in enrolments for Alstonville High School may be temporary as there has been a significant increase in children attending nearby Wollongbar Primary School, within this school's catchment, (+34% or 74 children between 2013 and 2016). This increase is as a result of new housing development in Wollongbar which is likely to be an influencing factor for at least the next 5 – 10 year period.

Diagram 21: Change in education institution type attending, 2001 to 2011



3.8 Employment industry sector changes

In 2011 3.8% of Alstonville labour force was unemployed compared with 6.3% of Ballina Shire's labour force. Alstonville's unemployment rate was also significantly below State (5.9%) and Australia wide (5.6%) levels. It is noted here, however, that the labour force participation rate of the population in Alstonville in 2011 was lower (50.3%) compared with Ballina Shire (54.9%).

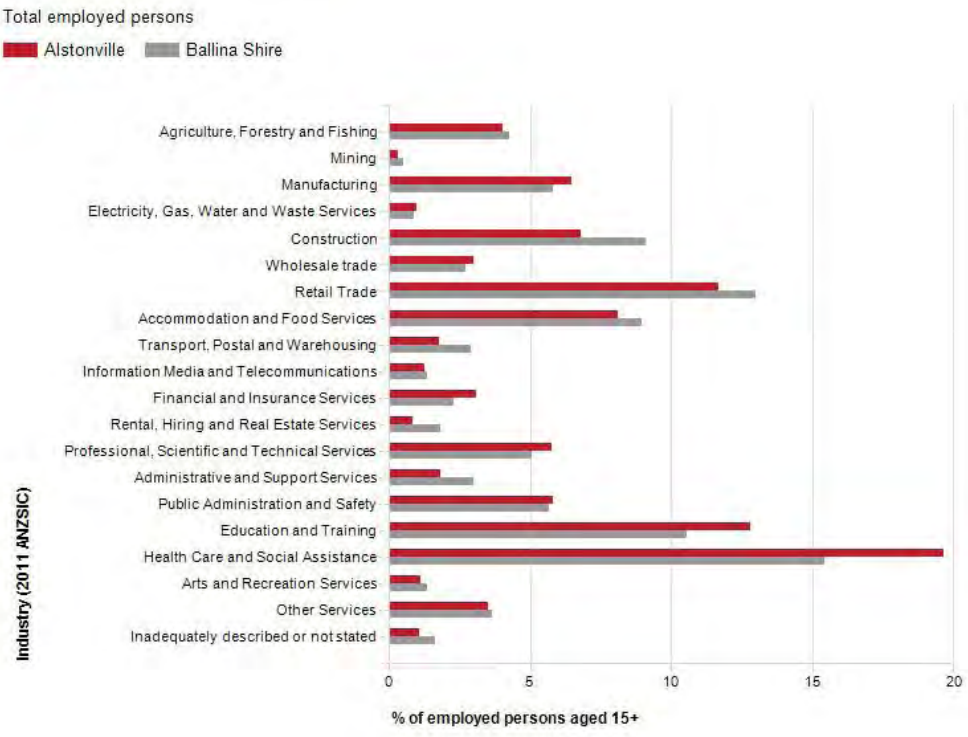
Between 2001 and 2011, the number of people employed in Alstonville showed an increase of 300, and the number unemployed showed a decrease of 91. In the same period, the number of people in the labour force showed an increase of 208 or 9.9%.

The major industry categories in which Alstonville residents were employed in 2011 are shown in Diagram 22 and changes to industry sectors providing employment in the period 2006 – 2001 are shown in Diagram 23.

2011 Census data indicates that there has been a significant increase in the number of persons employed (+300) in Alstonville between 2001 and 2011 and a decrease in the number unemployed (-91). Retail trade is the dominant group employing less people whereas the health care and social assistance industries are employing significantly more people.

The Alstonville community in 2011 appears to have good access to employment opportunities. Those opportunities predominately relate to 'white collar' and service industries which have gained jobs as opposed to retailing, manufacturing, transport and construction which all have provided less employment for Alstonville residents.

Diagram 22: Industry sector of employment - 2011



3.9 Where people work

Table 13 provides details, derived from the 2011 Census, of the locality in which people who live in Alstonville work.

Unfortunately there is no data presently available as to the number of residents who worked and lived in Alstonville. Alstonville has been included within the Ballina Region for the purpose of this census data.

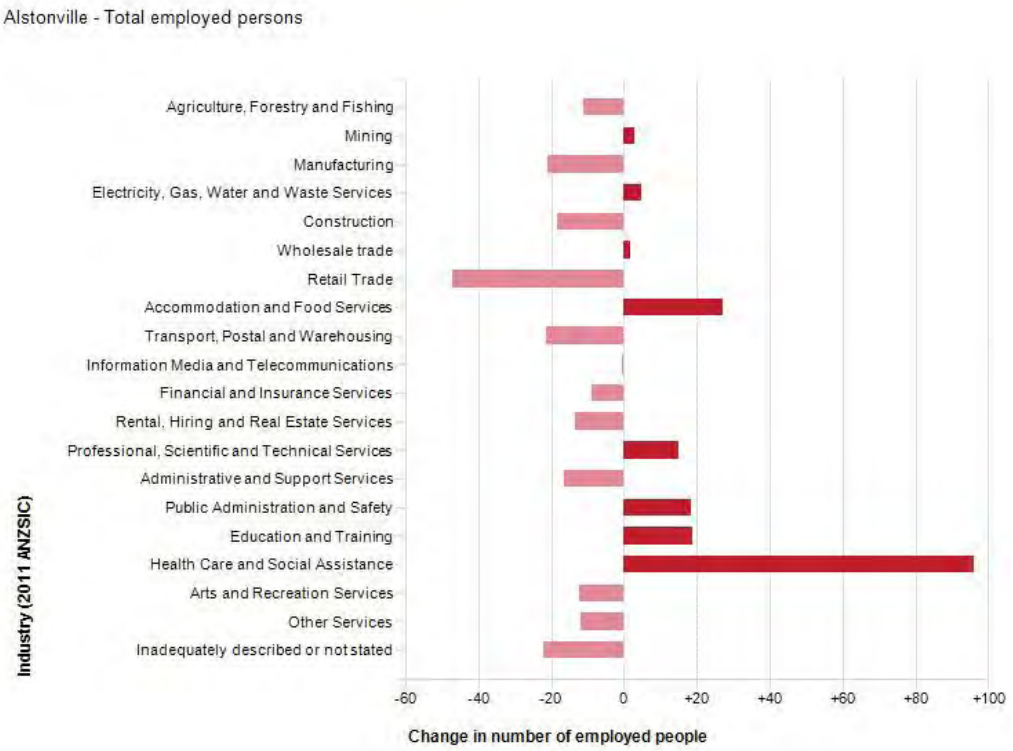
The data contained within Table 13 indicates that 64% of Alstonville's employed residents work within Ballina Shire. An additional 28% of employed residents work in either Lismore (23%) or Goonellabah (5%). In total 92% of Alstonville's employed residents work within a maximum half hour travel distance to their homes.

Of the Alstonville residents who indicated that they were in the labour force, in the week before census night in 2011, some 96.2% indicated that they were employed and 3.8% indicated that they were unemployed. Alstonville residents are therefore considered to have good access to jobs within reasonable close proximity to their homes based on data from the 2011 Census.

Table 13: Alstonville residents locality of workplace

LOCALITY	NUMBER	%
Ballina	488	25%
Ballina Region	753	38%
Lennox Head Skennars Head	26	1%
Bangalow	15	0.8%
Byron Bay	63	3%
Evans Head	24	1%
Mullumbimby	12	0.6%
Casino & Casino Region	22	1%
Goonellabah	92	5%
Kyogle	3	0.01%
Lismore	456	23%
Lismore Region	26	1%
Murwillumbah	3	0.01%
TOTAL	1983	

Diagram 23: Change in industry sector of employment - 2006 to 2011



CHAPTER 4 ALSTONVILLE'S FUTURE VISION

4.1 Pre-study community engagement – what did we do?

Council met first with some key community members to talk about what approach would be best to take. These ideas, and our own, formed the basis of our first discussions with the community.

To launch the community engagement, we wrote to property owners, during June 2016, who were located in the urban area of Alstonville and adjacent rural areas. In total some 3000 letters were posted. Included in the mail out was a postcard (Diagram 24) highlighting the Alstonville2036 webpage and seeking feedback on Alstonville's future.

A pop up street stall was located near the bus stop on the Corner of Daley and Main Streets on Thursday, Friday and Saturday mornings (30 June to 2 July 2016) and a number of residents and visitors were interviewed.

The media covered our engagement activities with a radio interview on ABC North Coast on Friday 1 July 2016 and a television interview on NBN News on 20 July 2016.

The Alstonville-Wollongbar Chamber of Commerce assisted with 'spreading the word' by Facebooking the engagement process at least once. Council staff met with the Chamber of Commerce as a group, as well as with the executive of the Alstonville and District Football Club.

Diagram 24: Alstonville2036 Postcard

4.2 Pre-study community feedback

We received feedback personally – at our street stall and also in meetings or appointments made by keen community members. We received emails and letters with suggestions and ideas. We also received many surveys with complex comments and suggestions. Table 14 shows the types of feedback that we received.

We received three submissions in a map format, setting out suggestions for a town square, and for a series of walking tracks in and around Alstonville. Diagram 25 contains an extract from one of these submissions.

These creative approaches to providing feedback are great to receive because they are very visual and definite about the ideas contained within them. They often illustrate feedback that others have provided in written or verbal form.

Table 14: Summary feedback type

FORMAT OF FEEDBACK	NUMBER OF RESPONSES	OTHER COMMENT
surveys	86	
personal feedback (street stall)	30 separate groups of people	One group had 5 people in it, and there were a number of couples who spoke to us
personal feedback (email, letters or meetings)	21	
group meetings	2	Villa Football Club and Alstonville-Wollongbar Chamber of Commerce (this was only an update on the engagement in the community, and a presentation back on their questions but generated a couple more emails)
TOTAL	139	

Alstonville residents discussing ideas with staff at the street stall

4.2.1 What did people say?

A few themes have been quite common in the feedback we have received. These can be loosely grouped as discussed below.

The 'feel' of Alstonville

People love the natural environment and the quiet atmosphere. They love the small village atmosphere. They love that people are friendly and welcoming for newcomers. They feel it is a family place.

Two thirds of survey respondents said they liked the small village atmosphere of Alstonville and the natural environment and the quiet of Alstonville. Diagram 26 contains a graph of resident responses to the question What attracts you to living in Alstonville?

Agriculture is important, and we shouldn't lose the opportunities it provides

Many people commented on the fertile soils surrounding Alstonville and the need to retain their productive capacity for agriculture of some kind. Even where an individual submission provided feedback on growth options, this theme came through strongly. Many were very definite in their comments about retaining land for agriculture and not allowing further subdivision onto these lands.

This included the retention of green approaches to town.

One comment on flexibility relating to allowing dual occupancy in rural areas was made by a local real estate agent.

A level of support for further development

Approximately two thirds of submissions indicated that there is some scope for further development, either by intensification of densities in some parts of Alstonville or for extension of the urban area. Some 26% of respondents suggested that densities should be increased closer to the village centre.

The remaining one third of respondents indicated support for 'no growth' (21%) or a new village elsewhere (8%).

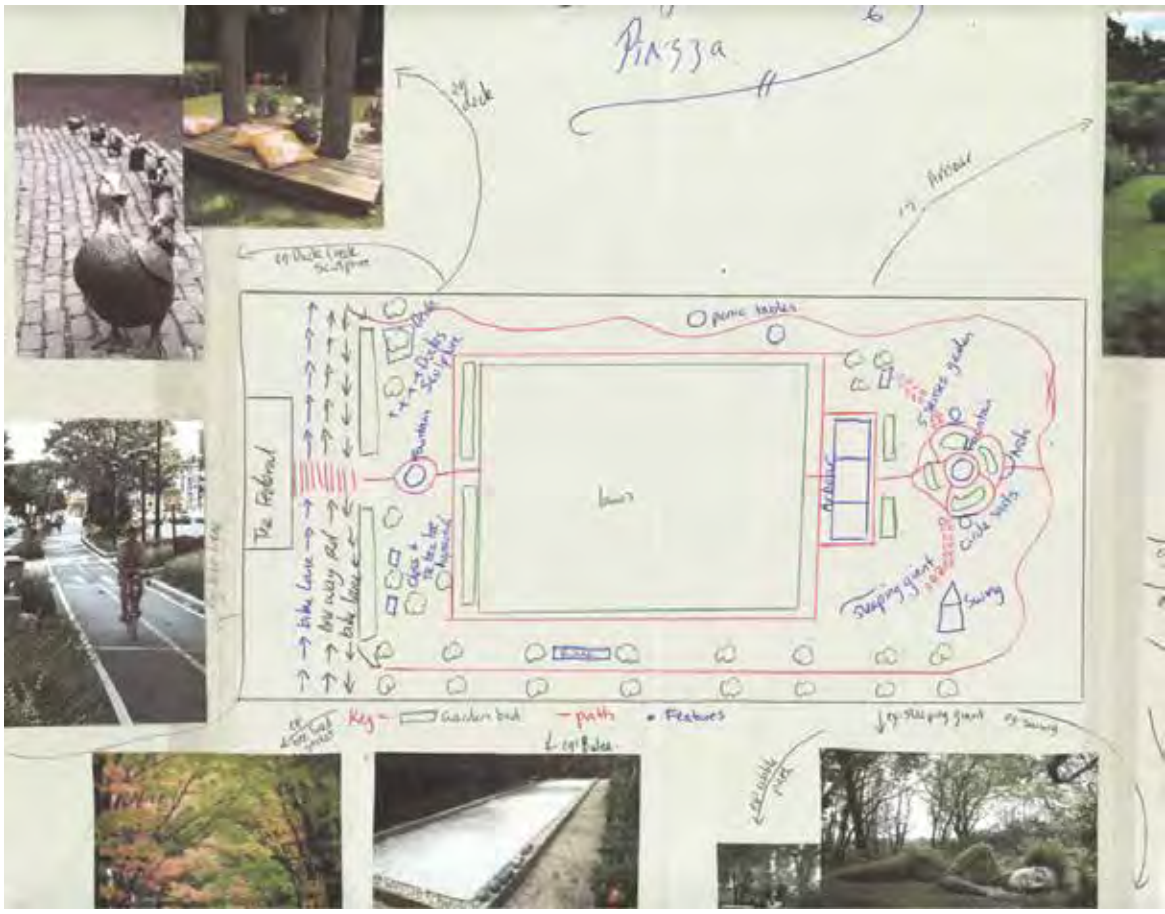


Diagram 25: Extract from Catherine Chamberlain's submission titled 'Ideas for Alstonville Piazza'

One person who said they wanted no growth, commented that:

> "I think that I will have to accept increased density of housing around the CBD. It might even be multi-storey. Ideally it will be occupied by the aged who have left the outer parts of town and thus made room for young families…"

The above was said after a dialogue considering the aging demographic and ways to keep schools, sporting clubs and businesses flourishing.

Creating opportunities for denser housing around the village centre and to allow for comfortably sized homes was a common theme in discussions at the street stalls. Room for caravans and 4WDs was mentioned as desirable. Many of those mentioning these ideas were in their 60s, with no children left at home and a desire to remain living in Alstonville because of their social networks and because they like their village. Respondents talked about large homes with empty bedrooms on large blocks as being ideal for families. Many wanted to move closer into the village as a hedge against becoming more limited in their mobility or ability to drive, but as mentioned above still wanted to retain certain features such as parking for recreational vehicles.

The graph contained within Diagram 27 was compiled from data contained in survey responses. It provides an indication that the community is split between 'no growth' additional development within the current village footprint and expansion of existing residential areas.

Diagram 26: Graph of resident survey response – attracting features

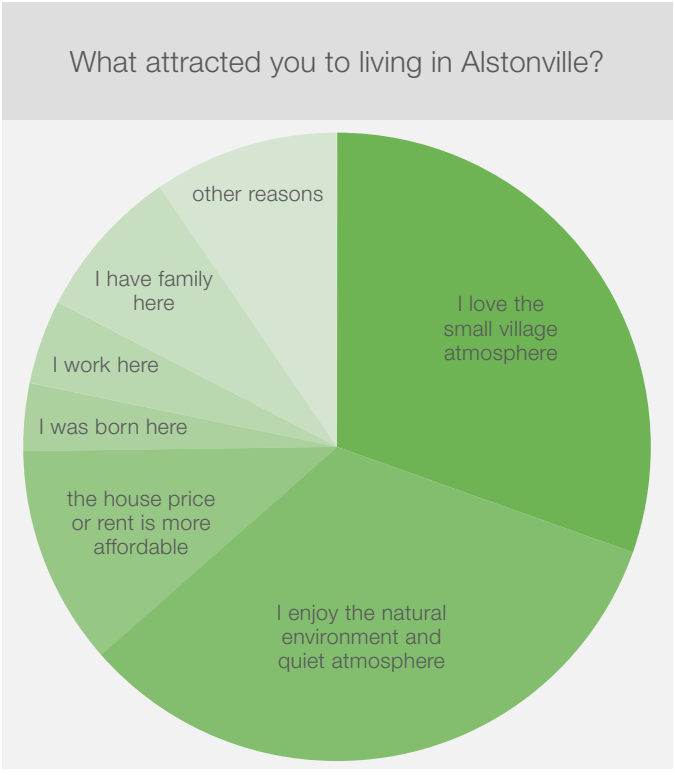
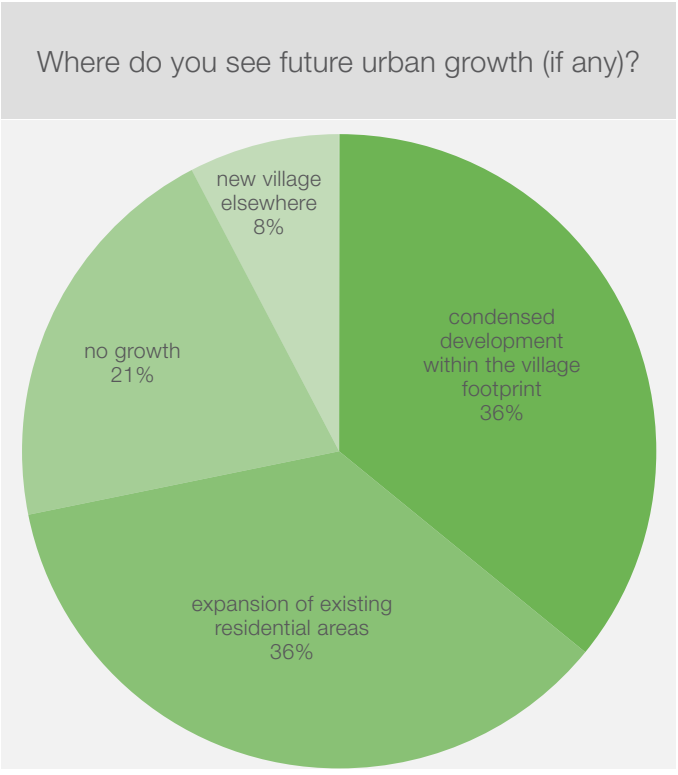


Diagram 27: Graph of resident survey response – future growth options



4.3 A vision for Alstonville's future

Diagram 28 contains a word cloud which was created using key words contained in survey responses, emails, letters and interview notes. These words described the things that people value about living in Alstonville and would like to see as part of its future. The relative size of the words relates to their frequency of use in comments received.

Utilising the words and themes contained within the word cloud the following vision for Alstonville has been developed for further discussion with the community.

> "our community has a vision for the future of Alstonville to 2036 that involves:
>
> ensuring that the village's character, sense of community and quiet lifestyle is maintained
>
> providing new housing opportunities that are affordable and provide choice for people to meet changing life needs
>
> enhancing village connectivity through the provision of walking paths, cycle ways and a town square
>
> fostering employment opportunities
>
> maintaining and enhancing our natural environment"

4.4 Draft Study and Plan Community Engagement

The exhibition of the draft Alstonville Planning and Environmental Study and draft Strategic Plan 2037 was launched at the Alstonville Plateau Bowls and Sports Club on 3 April 2017. More than 70 people attended the launch to hear a presentation from Council staff on the ideas contained within the study document.

At the conclusion of the exhibition period on 12 May 2017 some 69 on-line survey responses had been received as well as a number of detailed written submissions.

Arrangements are being made for the Council to considered submissions received at its Ordinary Meeting on 27 July 2017.

Launch of the draft Strategic Plan, 3 April 2017

Diagram 28: Desired Alstonville Attributes – Current and Future

CHAPTER 5
VISION ELEMENT ONE
TOWN CHARACTER, SENSE OF COMMUNITY AND LIFESTYLE

5.1 Village character

Alstonville's character is considered to be defined by elements which include:

- gardens and tree lined streets
- timber residential and commercial buildings with local historic value
- commercial village centre
- low rise development
- friendly locals and a welcoming community
- elevated plateau location with rural vistas
- rural area separation between plateau villages
- productive rural hinterland.

The above character elements are considered to be valuable as they assist to cement Alstonville's place as part of the Far North Coast's region of villages. Planning strategies for Alstonville's to 2036 may be developed so as to reinforce these character elements.

Main Street public domain works undertaken by Council in the period 2010 to 2011, at a cost of approximately $2.8 million, substantially assisted to reinforce Alstonville's village character. These works included undergrounding of power lines, new architectural street lighting, new footpath paving, landscaping and tree planting, landscaping, building and civil works in Freeborn Park, reconstruction of

village beautification ideas

main street private property beautification strategy

annual garden competition

Main Street beautification works completed in 2010-2011

Bugden Lane and the construction of the pathway linking the Village Plaza with Main Street.

5.2 Gardens and tree lined streets

Events that provide a focus on village beautification through gardening and landscaping will assist to reinforce this character element.

The annual Craft and Garden Fair held by the Alstonville Wollongbar Quota Club provides an example of a suitable focus event. This event could be supported through a Garden Competition and the showcasing of select gardens as well as floral displays in business areas. The incorporation of rural hinterland properties could provide additional interest and contribute towards creating a significant spring tourism event.

5.3 Maintaining the built environment - reinforcing local history

Nominating items of the built environment for listing within a council's local environmental plan ensures that the heritage value of listed items is considered and the items receive a level of protection not otherwise available to unlisted items.

Ballina LEP 1987 listed 9 items of Alstonville's environmental heritage. The number of listed items increased to 26 in Ballina LEP 2012. There still remain additional unlisted items that may benefit from the protection and incentives contained within clause 5(10) of Ballina LEP 2012. This includes a number of late Victorian timber

landscaped laneway

shopfront decorated with flower basket

Diagram 29: Extract from Byron Shire Development Control Plan 2014 – Chapter 1C – Non-Indigenous Heritage

Figure C1.3 – Roof replacement – tiling
The use of concrete and terra cotta roofing tiles on buildings in place of corrugated steel or AC roof sheeting is usually not appropriate due to the heavy loads imposed on the lightweight roof framing by the tiles. Tiles also look too heavy in most instances when used on weatherboard buildings with lightweight elements such as verandahs and window hoods.

houses located between 29 and 37 Main Street Alstonville (29 Main Street "Braeburn' was previously recognised as having local heritage value).

Some benefits of listing items within the LEP include:

- Council must consider the effect of development on the heritage significance of a listed item
- Council may require the assessment of the impact development in the vicinity of a heritage item may have on the significance of the item
- Council may grant consent to development for any purpose of a building that is a heritage item even if that purpose would otherwise not be permitted.

Maintaining the contribution made by timber residential and commercial buildings, with local historic value, to Alstonville's character may be assisted by initially encouraging property owners to list properties within Ballina LEP 2012 identified in the *Shire Wide Community Based Heritage Study (2008)*.

Benefit may also be derived through incorporating a specific chapter within Ballina Shire Development Control Plan 2012 (DCP 2012) which addresses heritage issues as part of the development process. The extract below has been taken from *Byron Shire Development Control Plan 2014 – Chapter 1C – Non-Indigenous Heritage*. It provides an example of the guidance that may be provided to owners of buildings with heritage value by incorporated a heritage chapter within Ballina Shire DCP 2012.

reinforcing local history ideas

encourage listing of properties with local history value with BLEP 2012

consider a heritage chapter within BDSCP 2012

undertake collaborative community projects to document and promote local history and heritage

examples of buildings with potential local heritage value

33 Main Street, Alstonville

6 Commercial Road, Alstonville

5.4 Low rise development - height controls

Ballina LEP 2012 contains a general 8.5 metre maximum building height limit for Alstonville with the exception of the B2 Local Centre zone which is subject to a 9 metre maximum height limit. Building height refers to the vertical distance from ground level (existing) to the highest point of the building. The 8.5 metre building height is sufficient to enable a two storey building to be erected on most sites.

The height of the majority of buildings in Alstonville, both residential and commercial, consists of single storey development. There are a few notable exceptions to this including the historic Federal Hotel in Main Street which has a height of approximately 9 - 10 metres above the Main Street footpath. A more recent example relates to a roof element associated with the Alstonville Plaza shopping centre façade facing Robertson Street, Alstonville.

In the context of Alstonville, two storey development is considered to be low rise, and compatible with the character established by existing buildings.

There may be a case for higher buildings, closer to or part of the Alstonville commercial centre. If this is enabled, a key consideration is ultimately how high these buildings should be.

The photos on page 43 provide examples from Hobart's historic wharf precinct where three storey residential development with heights of approximately 10 metres have been constructed.

town centre height control idea

consider increasing the maximum building height for B2 Business Centre zone from 9 metres to 10 metres

Federal Hotel

facade of Alstonville Plaza

Examples in photos 10 and 11 are considered to still retain a human scale when viewed from the footpath. This scale is achieved through careful design and the use of building materials, colours and street trees. It is considered possible to design residential or shop top housing development up to 10 metres in height that would still be sensitive to the character established by Alstonville's existing built form. Higher buildings provide opportunities for higher densities to be realised closer to the town centre especially on sloping sites. In so doing housing choice and availability is increased in the area most sought after by some Alstonville residents.

Higher buildings also create design challenges relating to accessibility, overlooking and overshadowing which require consideration and resolution.

5.5 Friendly welcoming community

There are many factors that contribute to community happiness and wellbeing. Things that make for a happy community include community connectedness through social networks (friends, clubs, volunteer organisations etc), good access to health care, education and sporting activities, employment opportunities, safety and community empowerment (being able to influence the community's future).

The level at which a community's population grows each year (or declines) may also influence community happiness and wellbeing. If a community grows too fast support facilities struggle to maintain services. Similarly, if a

population growth limit idea

apply strategies that support annual population growth within the range of 0.7% to 1% per annum over the next 20 year period

example of three storey residential development

example of three storey residential development

community loses population then services and facilities tend to also decline or be removed.

Alstonville's population growth rate, over the period 2001 to 2011, was 0.7% per annum or about 38 additional people per year. This level of population growth may have assisted in maintaining a friendly welcoming community. Projected population growth in the period 2016 to 2036 has been forecast to reduce to an annual average of +0.27% or an additional 14 persons per annum based on the assumptions made in section 3.5 of this study.

It is considered that adopting strategies that have the potential to increase annual population growth above the projected +0.27%, to the levels experienced in the period 2001 to 2011 or slightly higher (+0.7% to +1%), should not compromise the sense of community and the lifestyle enjoyed by Alstonville residents.

Table 15 contains information relating to the impact of various population increase scenarios.

5.6 Rural vistas

Placing a value on the retention of views across rural landscapes when considering development proposals and giving consideration to the creation and maintenance of view corridors would assist to reinforce this element of Alstonville's character.

View sharing provisions may be incorporated within Council's DCP which may then be considered by Council staff when assessing development applications.

rural vista ideas

recognise that views across rural landscapes are valuable and warrant consideration when assessing new development

through community engagement, consider designating significant view corridors and incorporating view sharing considerations within Council's Development Control Plan

Table 15: Growth Scenario Implications for Alstonville's Population 2016 to 2036

ANNUAL INCREASE FACTOR	POPULATION 2036 (INCREASE ESTIMATE)	HOUSING INCREASE ESTIMATE (based on 2.28 persons per dwelling)
+0.27%	6168 (+324)	140 or 7 per annum
+0.50	6457 (+613)	270 or 14 per annum
+0.70	6718 (+874)	380 or 19 per annum
+1%	7130 (+1286)	560 or 28 per annum

View corridor locations of special importance must first be identified and agreed before being incorporated within the DCP. Once a view corridor is established its retention then becomes a matter requiring special consideration when assessing the merits of development proposals. View corridors are generally located across public land such as parks, footpaths and roads.

Alstonville rural view

5.7 Rural separation between plateau villages

Alstonville is located approximately 1.2 kilometres to the south–east of Wollongbar. The area between the two villages is utilised primarily for agricultural purposes with macadamia nut production being the predominant agricultural land use.

The 2016 aerial photograph extract contained within Diagram 30 shows the rural area which separates Alstonville from Wollongbar.

The separation between the villages and the lack of urban sprawl is a distinctive feature of villages located on the Alstonville Plateau. Together with character elements Maintaining Rural Vistas (Section 5.6) and maintaining a Productive Rural Hinterland (Section 5.8) the rural separation between Alstonville and Wollongbar is considered by many residents to be a valued part of the village's character.

separation between plateau villages idea

discourage proposals which seek to introduce urban style development within the rural area which separates Alstonville from Wollongbar

retain inter-urban break between Alstonville and Wollongbar in Council planning policies

The buffer area is zoned 7(i) Environmental Protection (Urban Buffer) under the provisions of Ballina LEP 1987. Council is required under the provisions of the State Government's Northern Councils E zone review process, to transition this zone to a suitable zone under the provisions of Ballina LEP 2012. Council 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 at its meeting on 27 April 2017. 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).

Diagram 30: 2016 Aerial Photo Extract Alstonville – Wollongbar Separation Area

5.8 Maintaining a productive rural hinterland

The Alstonville urban area is surrounded by State Significant Farmland as shown on Diagram 31. One way of maintaining a productive rural hinterland is to continue to apply a policy position that discourages the use of Significant Farmland for non-primary production related activities. This may include the discouragement of policies that promote land fragmentation and subdivision as well as the building of additional dwellings on rural properties.

Consideration of policies which enable town and village residents to interact with their rural hinterland may be beneficial in raising awareness of the primary production value of these areas. Policies designed to encourage diversity in rural income streams may assist farmers to become more resilient to climatic and market variations.

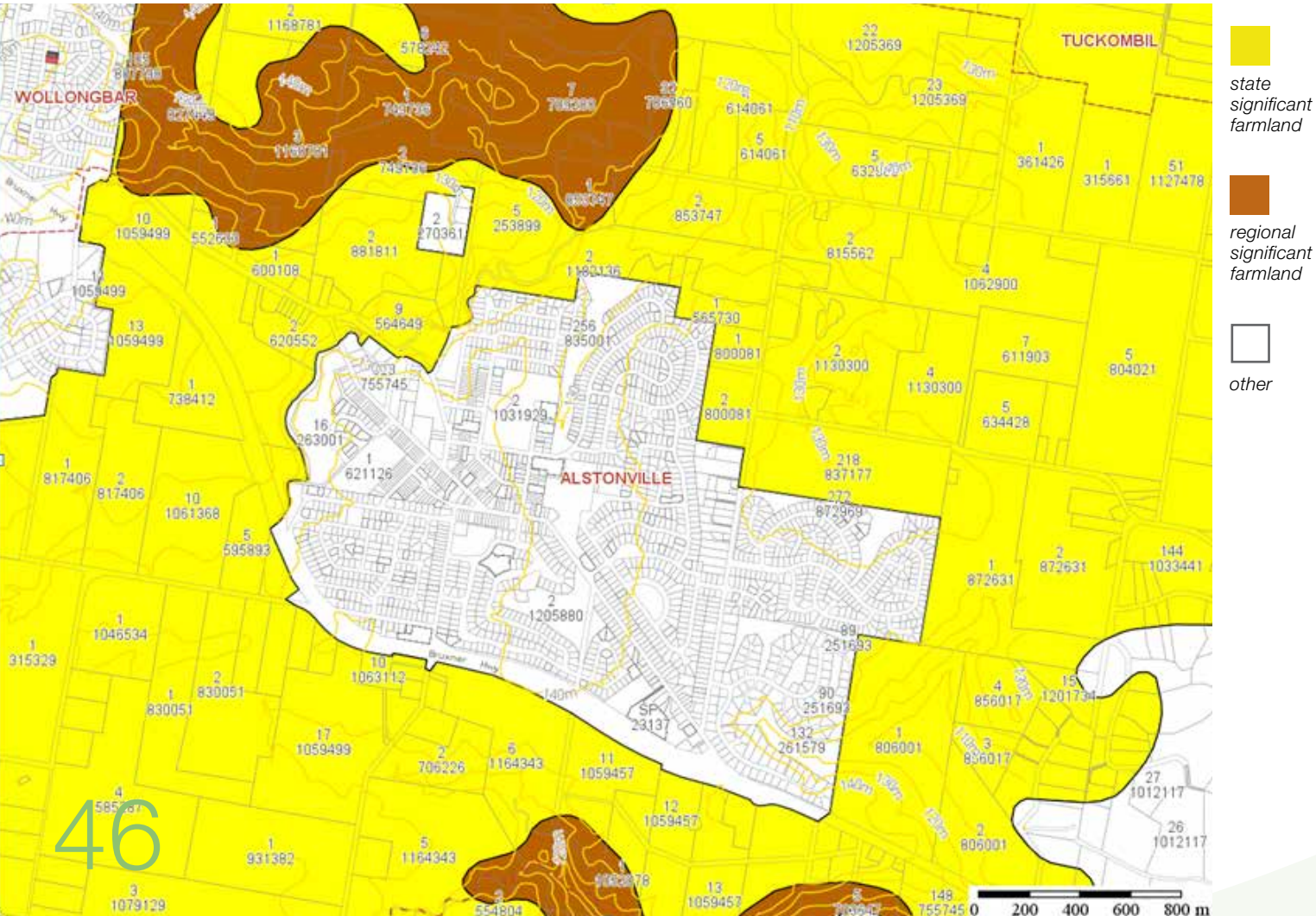
To enable a productive rural hinterland to be maintained will also require policies that recognise that many rural activities are not always compatible with urban land uses and require buffer separation distances to be maintained.

productive rural hinterland ideas

maintain policies that discourage rural-residential land uses upon state and regionally significant farmland

develop policies that promote a vibrant and productive rural hinterland, encourage primary production including the development of related income streams such as road side stalls, farmers markets, farm trails, farm stay accommodation and similar rural tourism activities

Diagram 31: Extract significant farmland map



CHAPTER 6
VISION ELEMENT TWO
PROVIDING AFFORDABLE HOUSING CHOICE OPPORTUNITIES

6.1 What is affordable housing?

The benchmark for rental housing to be considered 'affordable' is for the households to pay no more than 30% of their gross income in rent[24]. Households paying more than 30% of gross income on mortgage payments may also be considered to be suffering from mortgage stress.

6.2 Alstonville housing affordability

The 2011 Census indicates that in Alstonville 10.2% of households pay 30% or more of their household income in rent. Table 16 shows how this compares with other locations.

The Table 16 data indicates that median rents in Alstonville are lower than the shire average and less people are paying 30% or more of their income in rent.

In 2011 some 10.2% of Alstonville households could be considered as having rental affordability issues. In contrast this is slightly higher than those households that had mortgages. Some 8% of households with mortgages had repayments of 30%, or greater, of household income. This may have been a reflection of the level of mortgages as compared to average household incomes. Stated another way, housing for those with mortgages living in Alstonville in 2011 may be considered to have been relatively affordable.

vacant lot, Alstonville residential area

24 NSW Department of Planning, Affordable Rental Housing Review, Technical Paper, December 2010. P6

Table 16: Household rent payments 2011

HOUSEHOLD RENT PAYMENTS	ALSTONVILLE	WOLLONGBAR	BALLINA	BALLINA SHIRE	NSW	AUSTRALIA
median rent pw	$265	$285	$275	$290	$300	$285
households where rent payments are 30% or greater of household income	10.2%	9.9%	17%	13.2%	11.6%	10.4%

Table 17 provides additional details relating to the level of household monthly mortgage payments.

Weekly family income was greater in Alstonville in 2011 when compared to Wollongbar, Ballina, and the shire averages but below NSW and Australia averages as indicated in the Table 18.

In terms of the tenure of occupied private dwellings, Table 19 indicates that the proportion of households who own their homes outright is significantly higher in Alstonville than is the case in various other locations.

This data relates to the relative affordability of Alstonville's existing housing stock. Housing in Alstonville predominantly consists of stock more than 20 years old with fewer dwellings built in the last 10 year period. In comparison Wollongbar, which has had a significant number of new dwellings built in the past 10 year period, has higher rental payments and more households with mortgages.

A significant challenge exists in maintaining housing affordability in Alstonville if new housing opportunities are proposed to be created. Experience elsewhere has found that if the sale price of existing older dwellings is less than the cost of moving into a new building (villa, townhouse, dual-occupancy) then effectively many residents will be unable to downsize within their own community.

Table 17: Household mortgage payments 2011

MORTGAGE MONTHLY REPAYMENTS	ALSTONVILLE	WOLLONGBAR	BALLINA	BALLINA SHIRE	NSW	AUSTRALIA
median mortage repayment	$1,517	$1,517	$1,600	$1,733	$1,993	$1,800
households where mortgage repayments are 30% or greater of household income	8%	10.7%	5.9%	8.5%	10.5%	9.9%

Table 18: Household income 2011

FAMILY INCOME 2011	ALSTONVILLE	WOLLONGBAR	BALLINA	BALLINA SHIRE	NSW	AUSTRALIA
without children	$1,802	$1,709	$1,684	$1,709	$2,120	$2,081
with children	$1,995	$1,856	$1,745	$1,892	$2,370	$2,310

Table 19: Household tenure 2011

HOUSEHOLD TENURE	ALSTONVILLE	WOLLONGBAR	BALLINA	BALLINA SHIRE	NSW	AUSTRALIA
% owned outright	46.4	38.5	39	40.2	33.2	32.1
% owned with mortgage	27	37	18.4	26.7	33.4	34.9
% rented	22.8	22.3	37.4	29.2	30.1	29.6

The sale price able to be achieved on older housing also has to be sufficient to compensate for items such as stamp duty and moving costs. These costs add in the vicinity of $20,000 to a $500,000 purchase.

Increasing the supply of new housing is only part of the solution to maintaining housing affordability. The Minister for Planning Robert Stokes recently indicated that[25]:

> "simply increasing housing supply was only part of the solution to Sydney's housing affordability crisis; it became a necessity when there was clear evidence of an undersupply of particular types of housing in certain areas"

In the context of Alstonville, housing supply in the period 2001 to 2011 has been at a level which matched the population growth rate (additional 166 dwellings or 7% increase) and similar to the average rate of increase for Ballina Shire. Whether this level of supply will impact future housing affordability is not known. The rate of new housing supply is considered to be a risk factor for future housing affordability.

Also by way of comparison, Sydney has added 1.4% and Melbourne 2.1% to its housing stock every year in the 10 year period to 2011[26]. These higher levels of housing supply have still been insufficient to contain the significant increases in median property prices experienced by these cities over the past three years.

Discussion with a number of Alstonville's real estate agents confirmed that all types of housing are in very short supply as of November 2016. The rental vacancy rate is currently close to 0% with agents indicating that on a daily basis prospective tenants are turned away due to lack of supply. This shortage, and a return of investors to the Alstonville market, has impacted on the price of homes and the rents in Alstonville.

25 Sydney Morning Herald article published 22 October 2016 – Twenty years of Sydney housing supply locked up in spare rooms

26 Grattan Institute 2011, The Housing We'd Choose, p28

Wardell Road, Alstonville

One agent indicated that prospective renters are predominantly locals with a substantial number of older single females looking for unit accommodation close to the village centre. Rents for units range from $290 to $360 per week and for houses from $400 to $475 per week.

Given the shortage of housing accommodation for purchase or rent, many locals have found that they need to look elsewhere for suitable accommodation.

6.3 Alstonville housing growth options

Pre – study feedback from the Alstonville community indicated that the provision of affordable housing choice opportunities is a priority issue for many residents. Residents were, however, divided as to the manner in which such opportunities should be created. Some residents preferred a no growth scenario where the population of Alstonville remained relatively static with opportunities for more diversity in housing choice for existing residents becoming available. This group of residents also included some which advocated for a new village elsewhere.

Those residents that were not opposed to the growth of the village were divided as to whether the growth should occur within the existing village boundaries, through increased densities, or whether there should be an expansion of the village boundaries.

The 2012 Ballina Shire Growth Management Strategy (BSGMS) responded to a Ballina Shire dwelling target of 8400 additional dwellings by 2031 set under the provisions of the Far North Coast Regional Strategy. This dwelling target was achieved primarily through a greenfield land release program at Lennox Head,

Cumbulam and Wollongbar. Realisation of the Shire dwelling target does not rely on any dwelling growth opportunities being identified in Alstonville. A strategic action contained within the BSGMS for Alstonville does however relate to the investigation of the potential for infill development intensification.

The no growth, increased densities within current boundaries and the expansion of boundaries scenarios and implications are examined in this study.

6.3.1 No growth

When considering the 'No Growth' scenario, the village's capacity to grow within the context of existing controls has also been considered.

The Forecast.id report contained at Annexure 3 predicts that the population of Alstonville will increase by 324 people between 2016 and 2036. The average increase per annum between 2011 and 2036 is estimated as +0.27% (14 additional people per annum). In the 5 year period, 2031 to 2036, growth per annum is forecast to reduce to +0.16% per annum (less than 10 people per annum).

The above low level population increase predictions are based on low level new dwelling construction estimates. These estimates range from 3 to 8 dwellings per annum or a total of up to an additional 147 dwellings in the period 2011 to 2036. Available new building opportunities are forecast to continue to decline within the existing village area to 2036.

6.3.1.1 New dwelling opportunities within the existing urban area

A survey undertaken in October 2016 revealed that the Alstonville urban area contained a total of 24 vacant R2 Low Density Residential (R2) zoned lots. A review of vacant unsubdivided R2 zoned land has found only limited potential for the creation of additional lots.

6.3.1.2 New residential lot opportunities within the existing urban area

One area with identified subdivision potential is located on the western side of Teven Road north of Parkland Drive as shown by red outline in Diagram 32. This area

Diagram 32: R2 zoned land containing large lots with subdivision potential

area with subdivision potential western side of Teven Road

dwellings location presents a constraint to subdivision

contains a number of large lots which may yield in the vicinity of 10 additional lots (mainly battle-axe shaped lots). The central location of some existing dwellings on these lots is a constraint that may impact on whether these lots are subdivided in the period to 2036.

6.3.1.3 Medium density opportunities within the existing urban area

In terms of vacant R3 Medium Density Residential (R3) zoned land, 4 vacant lots were identified with a total land area of 1.078 hectares. The R3 zoned vacant lots have a potential to provide housing for an additional 35 dwellings based on the current permitted maximum density of 1 dwelling per 300m^2 of land area.

Additional potential exists through the redevelopment of existing built upon R3 zoned sites. An example of this is the land owned by Baptist Care in The Avenue. This land has a total area of approximately 4.36ha of which 3.8ha is zoned R3 with the remainder being zoned R2. The site currently contains 28 independent living units and a 45 bed Residential Aged Care Facility. Plans have been prepared for a 6 stage redevelopment of this facility to provide for 72 independent living units and a Residential Aged Care Facilities containing 90 beds.

In total, the R3 zoned areas occupy an approximate land area of 33 hectares. The location of R3 zoned properties, open space and the commercial centre is shown in Map 4.

Table 20 provides details of the location of the R3 zoned land and forecast potential for additional dwelling units to 2036.

The total number of potential additional dwellings considered likely to be yielded from a combination of existing vacant lots, unsubdivided R2 zoned land and R3 zoned land with assessed development potential is 356 dwelling units. The Baptist Care facility is likely to yield an additional 48 self- care dwellings. Table 21 provides a summary of the source of these additional dwelling units.

With some exceptions, it has been assumed that in the period 2016 - 2036 only 25% to 50% of available dwelling increase opportunities will be developed.

Map 4: Location of Alstonville's R3 zone areas, open space and commercial centre

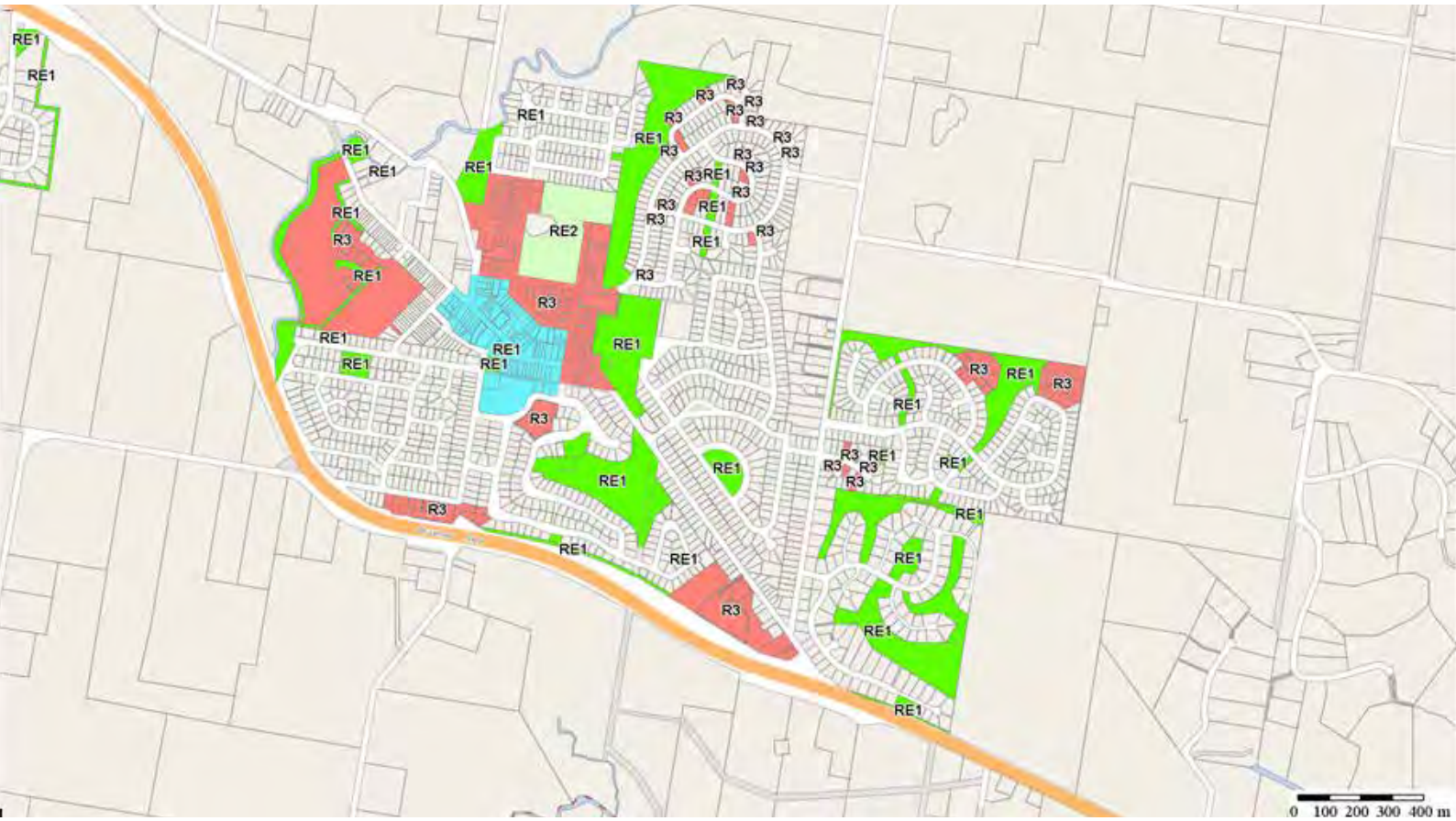


Table 20: R3 Zone locations and development potential estimates

LOCATION (WALKING DISTANCE TO CBD)	APPROX. TOTAL AREA	ESTIMATED DEVELOPMENT AREA*	ESTIMATED DWELLING YIELD**	ESTIMATED ADDITIONAL DWELLING YIELD TO 2036 ***	COMMENTS
Robertson Street (<400m)	1 ha	0	0	0	existing strata units
Tanamera Drive Area (800m)	3 ha (34 lots)	640m^2	1	1	existing dual occupancies on 33 lots. One lot contains a dwelling house
Tranquill Place and Calypso Close	2.8ha	0	0	0	fully developed
Norvell Grove, Wardell Road, Mellis Street (<400m)	1.7ha	0.7ha	23	6 - 11	includes Glenroyal Gardens Seniors Living units, 2 duplexes a triplex and a 4 unit complex
Ballina Road / Bruxner Highway (800m)	4.8ha	1.5ha (0.8ha vacant land)	50	12 - 25	includes Cypress Gardens and Alstonville Leisure Village
North-East of CBD includes Commercial Road, Green Street and High Street (400m)	8.8ha	5.9ha (0.2ha vacant land)	196	50 - 100	area available includes properties containing extensive improvements including some with potential historic value.
Baptist Care Site, Cawley Close and The Avenue (400m)	3.8ha	0	0	0	redevelopment of existing site proposed including R2 zoned area
Alstonville High School Site (<400m)	5.9ha	0	0	0	unknown if any land surplus to requirements
Cawley Close (400m)	1.2ha	0.12ha	4	4	little development potential due to existing strata units and nature of improvements
TOTALS	33ha	8.3ha	274	73 - 141	

* Land not strata subdivided or developed for multi- unit or dual occupancy purposes
** Based on a density of 1 dwelling per 300m2 of site area
*** Assumed that 25 – 50% of additional dwellings constructed

Table 21: Potential additional dwellings to 2036 under existing controls

SOURCE OF NEW DWELLINGS	TOTAL ESTIMATED DWELLING YIELD (EXISTING CONTROLS)	TOTAL POPULATION INCREASE POTENTIAL	FORECAST DWELLING YIELD TO 2036	ESTIMATED POPULATION INCREASE*
Existing (October 2016) vacant subdivided R2 zoned Lots	24	55	24	55
Further subdivision of R2 zoned areas	10	23	10	23
Development of R3 zoned Areas with identified potential	274	625	73 - 141	166 - 321
Baptist Care Facility	48	72	Baptist Care Maranoa Village redevelopment additional 48 self- care units	72
APPROXIMATE TOTAL	356	775	155 - 223	316 - 471 PEOPLE

* Based on a household size of 2.28 persons as generally estimated by forecast.id and 1.5 persons for self care units

The above analysis indicates that in the period to 2036 potential exists for 155 - 223 dwellings to be created within Alstonville's existing urban area. The analysis has also generally confirmed the assumptions made in the Forecast.id report contained in Annexure 3.

In terms of population growth potential, supporting a 'No Growth' Strategy' (no additional new housing opportunities being created), has the potential to result in Alstonville's population increasing by 316 - 471 people in the period 2016 to 2036 assuming the take up of all the opportunities identified in Table 21. This would represent an annual population growth rate in the vicinity of +0.3% to +0.4% per annum.

The low level capacity within the existing Alstonville urban area for additional dwellings may not supply the community with the level of housing choice seen as desirable. This then has the potential to adversely impact housing affordability by placing price pressure on existing dwelling stock.

Vacant residential land in Pinehurst Court October 2016 [27]

27 An 8 lot subdivision in Pinehurst Court, Alstonville was registered in October 2015. Five lots remain unsold as of October 2016 with prices ranging from $240 - $265,000. The last recorded sale was in respect to Lot 273 Pinehurst Court, sold in September 2016 for $290,000.

6.3.2 Opportunities for increased densities within existing urban area

A number of options exist through which densities may be increased within Alstonville's existing urban boundaries. Some of these are listed and discussed below:

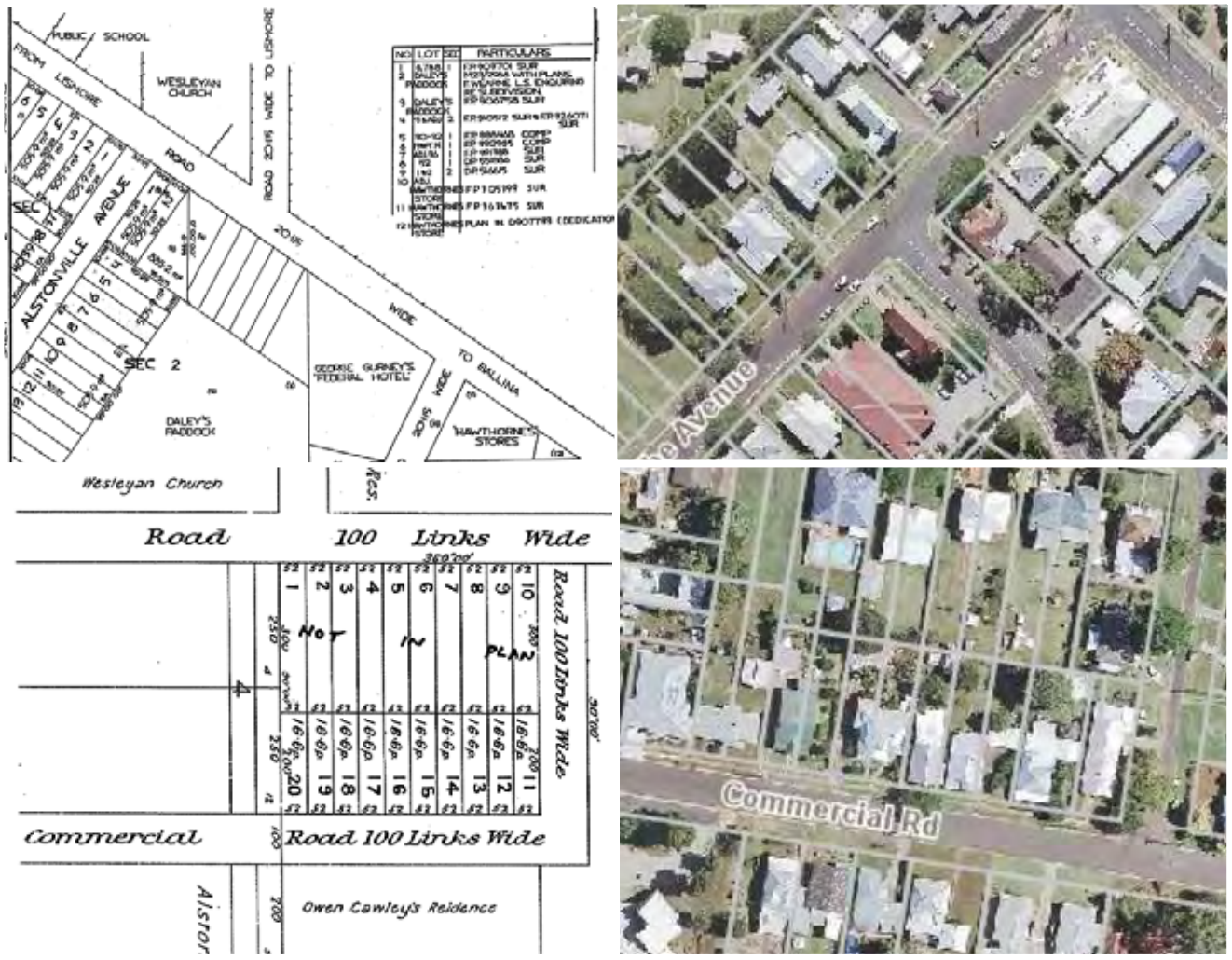
- decrease minimum subdivision lot size in R2 zone to below current 600m^2 per lot
- permit dual occupancy development throughout the R2 zone
- provide additional opportunities for multi-dwelling housing development by rezoning (some or all) R2 Low Density Residential zoned land to R3 Medium Density Residential
- increase densities within some (or all) R3 zoned areas above the 1 dwelling per 300m^2 of site area standard.

6.3.2.1 Decrease minimum subdivision lot size in R2 zone from current 600m^2 per lot

Residential lots with land areas below 600m^2 were created in the early days of Alstonville Village, typically in the early 1900s. A review of some of these early lots indicates that they have land areas in the range of approximately 420m^2 - 500m^2. Often it was the case that land owners purchased two lots and built their dwelling centrally over both lots. Diagram 33 provides examples of lots created in The Avenue (500m^2) and Commercial Road (420m^2) together with a contemporary aerial photo of the same area.

Many of the lots depicted in Diagram 33 still contain timber dwelling houses built at the turn of last century. Local estate agents have indicated that these dwellings are in high demand due to their historic character and proximity to the town centre.

Diagram 33: Examples of early subdivision pattern and 2016 aerial photo



Ballina LEP 2012 makes provision for a minimum 450m^2 lot size in some areas. This lot size has been applied to new release areas at Skennars Head, Cumbulam and Lennox Head. In these cases it is part of a strategy of realising a gross residential density of 15 houses per hectare compared with established residential areas which typically yield 5 - 10 dwellings per hectare.

In the context of providing housing choice opportunities in the Alstonville Village area it is considered that there may be some limited value in allowing a reduction in the lot size requirement from 600m^2 to 450m^2 in the R2 zoned areas. Map 5 shows the location of R2 zoned properties which have a minimum lot area of at least 900m^2. Some of these lots may have potential for further subdivision if the minimum lot size for subdivision were to be reduced to 450m^2.

Many of the lots shown in Map 5 were created during the late 1960s to the early 1990s. The general condition of housing on these lots is still considered to be good. In the majority of cases it is unlikely to be currently economically viable to demolish existing dwellings in good condition and subdivide so as to yield one additional lot. This may, however, not always be the case over the next 20 year period.

Reducing the minimum lot size to 450m^2 as suggested may also result in more traditional housing forms being provided as opposed to medium density type products. Table 22 summarises some of the advantages and disadvantages associated with a reduction in minimum lots sizes.

6.3.2.2 Dual occupancy dwellings on specific sites or throughout the R2 zone

Dual occupancy development consisting of two attached or detached dwellings, on one lot of land is currently only permitted within the R3 Medium Density Residential zone (R3). In such cases an attached dual occupancy development may be built on an existing lot having an area of at least 450m^2 or in the case of a detached dual occupancy on an existing lot having an area of at least 600m^2. Assuming such small lots exist within the R3 zone then such lots may be strata subdivided to provide separate title for each dual occupancy dwelling.

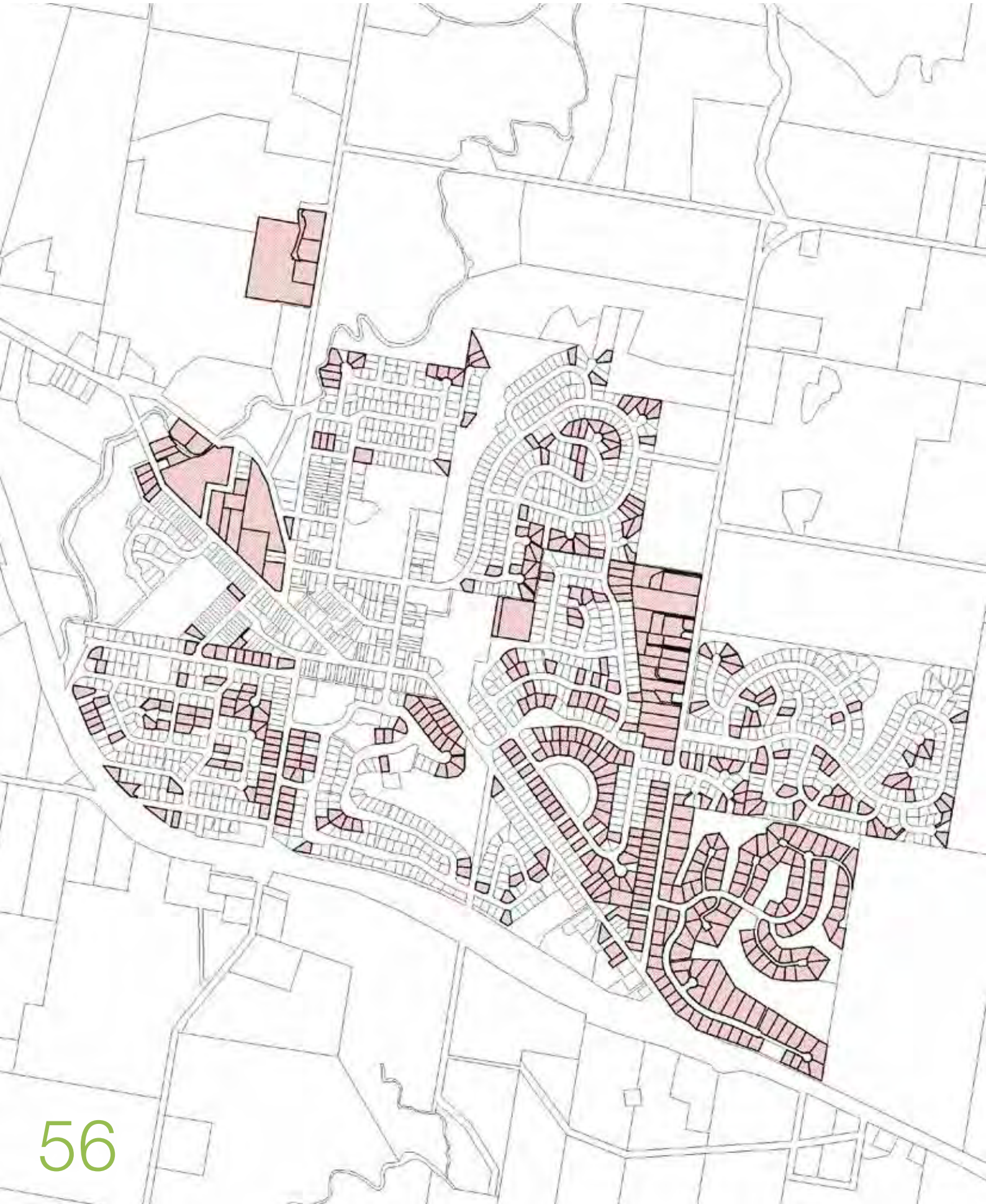
There were 34 dual occupancy lots created in the early 1990s within the subdivision centred on Tanamera Drive, Alstonville. These lots are now zoned R3. All but one of these lots has been developed for dual occupancy purposes. The scattering of dual occupancy lots throughout a subdivision is referred to as the “salt and pepper” approach.

Newer residential release areas such as located at Wollongbar, which are broadly zoned as R3, permit dual occupancy development throughout the R3

Table 22: Advantages and disadvantages R2 minimum lot size reduction

ADVANTAGES	DISADVANTAGES
increases development options	lot size not small enough to provide sufficient incentive given general good condition of housing stock
may result in smaller dwellings on smaller lots	may sterilise land otherwise suitable for multi-unit housing in the future
may provides a more affordable option for small scale development	low take up rate not likely to make much difference in terms of housing supply
may result in development more in character with the village through provision of front and rear yard and garden areas	other strategies such as permitting more dual occupancy development may be more popular and result in greater dwelling yield
likely low take up rate unlikely to impact village character	a lot size of 450m^2 may not be sufficiently low from an economic viability viewpoint

Map 5: Location of R2 zoned lots with land areas of 900m^2 or greater



zone subject to minimum lot size requirements (450m^2 attached or 600m^2 for a detached dual occupancy). Developer imposed building covenants may, however, restrict this type of development on some lots.

There are areas located within the R2 zone at Alstonville that may be suitable for dual occupancy development. One such area is located on the western side of Wardell Road south of Robertson Street, and close to the town centre. Many of the lots in this area have areas in excess of 900m^2, fall towards Wardell Road and container single storey dwellings built in the 1960s and 1970s. Permitting dual occupancy development on such sites, either through rezoning sites specifically as R3 or as part of a strategy of permitting dual occupancy development on certain sized R2 lots more generally throughout this zone, could be considered. Map 6 provides an analysis of the size, location and number of lots within various area categories within the R2 zoned area located in Alstonville Village.

The lot size analysis revealed that there are 529 R2 zoned lots located in Alstonville with a land area of 900m^2 or greater as shown on Maps 5 and 6. Approximately 500 of these sites may have some potential for dual occupancy development. The remaining sites form part of developments such as the Adventist Village, school and community use sites.

ideas to facilitate dual occupancy development

permit dual occupancy development throughout the R2 zone

permit dual occupancy development only on certain sized lots in the R2 zone, eg sites having a minimum area of 600m^2 or 800m^2 or 900m^2

rezone some land to R3 to permit dual occupancy development on this land

6.3.2.3 Rezoning some R2 Low Density Residential zoned land to R3 Medium Density Residential so as to enable multi-dwelling housing development

Multi dwelling housing means 3 or more dwellings (whether attached or detached) on one lot of land, each with access at ground level, but does not include a residential flat building. This form of housing includes villas, townhouses and terrace buildings.

Multi-dwelling housing is currently only permitted within the R3 zone and is subject to a development control plan density control which requires 300m^2 of site area per dwelling.

There are few suitable R3 zoned sites for new medium density development located to the south and west of the Alstonville commercial centre. Many of the zoned sites have already been developed for multi-dwelling or dual occupancy housing or in the case of land to the west of The Avenue utilised for Seniors housing.

There are a number of R3 zoned properties to the north and east of the Alstonville commercial centre located in South and Green Streets and Commercial Road which have not yet been developed for multi-dwelling houses. Many of these lots have a land area below 900m^2. This would require the consolidation of two or more lots to form a multi-dwelling site. These properties may not have been considered for redevelopment as it may not have been cost effective to do so. The value of existing improvements and the yields achievable under current controls (1 dwelling per 300m^2 of site area) may have contributed to the decision not to develop. What has occurred is that the larger sites have been redeveloped and the smaller sites have not.

A review of the following locations to the south-west of the Alstonville commercial centre, currently zoned R2, has indicated that they have potential as candidate R3 zoned area:

- Coral Street, northern side west of Wardell Road.
  Reasons: lot size and proximity and ease of access to commercial centre.
- The Avenue, western side from Coral Street north to the rear of

Map 6: Location of R2 zoned lots by lot area

lots which have frontage to Main Street.
Reasons: proximity and ease of access to commercial centre and potential to consolidate with the Baptist Care development.

- Block bounded by Daley Street, The Avenue, Coral Street and Wardell Road but excluding St Bartholomeus Church.
  Reasons: Proximity and ease of access to commercial centre.
- Wardell Road, western side south of Coral Street to Norvell Grove, and eastern side south of Robertson Street to the existing R3 zone.
  Reasons: lot size and age of existing dwelling stock, proximity and ease of access to commercial centre.

The above sites, as shown by red outline on Map 7, occupy a gross land area of approximately 6.6 hectares (includes existing dual occupancy, multi – dwelling housing and the preschool sites) which if all developed at current maximum densities would yield approximately 220 dwellings or approximately 150 more dwelling units than currently exist.

6.3.2.4 Increase Densities Within Some (all) R3 Zoned Areas

R3 Medium Density Residential zoned areas in Alstonville are subject to a 1 dwelling per 300m^2 of site area maximum density restriction. This development control is the same as applies to certain lots in Wollongbar and Wardell. The control is contained in Chapter 4 – Residential & Tourism Development of Ballina Shire DCP 2012. The objective of the density control is to ensure that medium density development is compatible with services, neighbourhood amenity and character.

Higher dwelling densities apply in Ballina (includes West and East Ballina) - 1 dwelling per 200m^2 of site area, Lennox Head and Skennars Head – 1 dwelling per 250m^2 of site area. There are also some R3 zoned sites over which no specific density control has been applied. In these cases the design process is required to be used to determine dwelling yield.

It is considered that there may be merit in an approach which provides for an increase in density for sites in closer proximity to the commercial centre as indicated in Table 23.

In terms of walking time 400 metres represents a gentle 5 minute walk. Facilities and services located within 400 metres of residents are generally regarded as being located within close proximity.

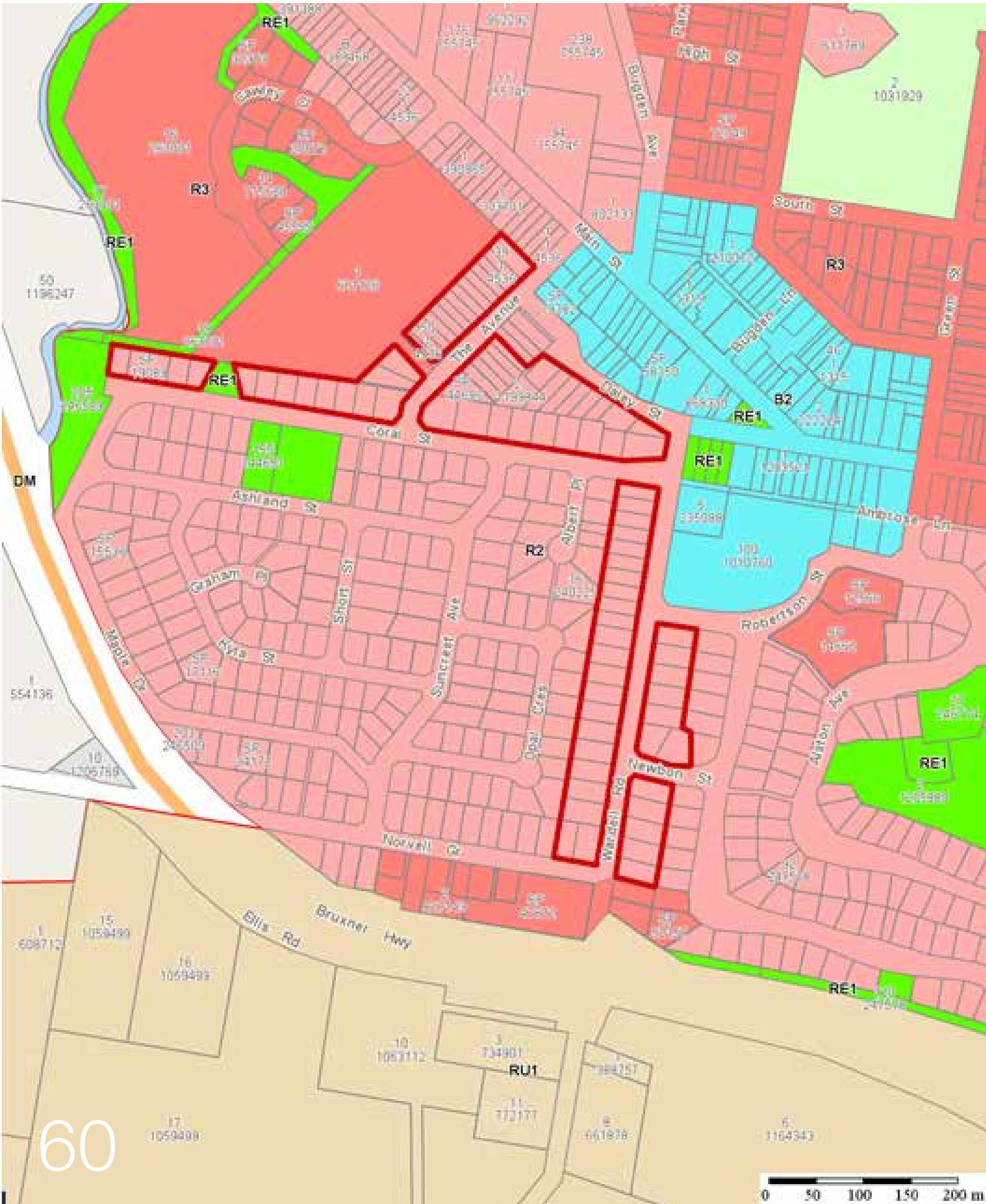
If higher densities are adopted around the Alstonville commercial centre this may stimulate development within this area and provide more housing choice for residents within easy walking distance to the commercial centre.

A potential concern with this approach is that it may lead to the loss of older style timber dwellings with local historical or character value for Alstonville Village. In this respect information obtained from local real estate agents indicates that older style timber dwellings enjoy a significant price premium compared to other housing forms. The price premium currently enjoyed by such dwellings is likely to lead to their renovation and retention, as opposed to demolition and redevelopment, at the densities suggested. This issue has been examined in more detail in the following case study which compares three recent property sales in Alstonville.

Table 23: Density related to walking distance to Alstonville commercial centre

APPROXIMATE MAXIMUM WALKING DISTANCE TO ALSTONVILLE COMMERCIAL CENTRE	DENSITY	ESTIMATED ADDITIONAL YIELD*
less than 400 metres	proposed 1 dwelling per 200m^2 of site area	112
more than 400 metres	existing 1 dwelling per 300m^2 of site area	0

Map 7: Candidate R3 medium density residential sites outlined in red



6.3.2.5 Case Study

Will older style timber dwellings, which add to the character of Alstonville Village, be under threat if increases in density are permitted?

17a South Street contains a renovated older style weatherboard and metal roof four bedroom dwelling house. The property was sold on 4 November 2016 for $600,000[28]. The property is zoned R3 Medium Density Residential and is located within 400 metre walking distance to the town centre. The dwelling is contained within a 411m^2 strata lot created in 2004. The rear strata lot has an area of 600m^2 and contains a single storey three bedroom dwelling house.

3/33 Commercial Road Alstonville consists of a 3 bedroom brick and tile villa in a block of 5 villas. This property sold on 31 October 2016 for $345,000. The property is also located within 400 metres of the commercial area and the site is also zoned R3 Medium Density Residential. The villa is contained on a strata lot having an area of 174m^2 which was also created in 2004.

13/39 – 45 Green Street Alstonville consists of a 2 bedroom brick and tile villa home in a block of 15 units built in 2000. It is also located within 400 metres of the commercial area and is zoned R3 Medium Density Residential. The villa is contained within a strata lot having an area of 149m^2 of which 118m^2 is building area. This property sold on 30 September 2016 for $345,000.

The 17a South Street example provides evidence of the price premium paid for older style timber dwellings within close proximity of the Alstonville commercial centre. An increase in the permitted density above the currently permitted 1 unit per 300m^2 to the suggested 1 unit per 200m^2 is unlikely to result in the loss of such dwellings given the significant price premium they enjoy above more traditional villas.

Will it be economically viable to develop if densities are increased?

Whether the proposed increase in density, from 1 dwelling per 300m^2 to 1 dwelling per 200m^2 of site area, is sufficient to generate demand and make development economically viable is examined in the data contained within Table 24.

17a South Street, Alstonville

3/33 Commercial Road, Alstonville

villa 13/39–45 Green Street, Alstonville

28 Realestate.com accessed 8 November 2016

Table 24: Development cost estimates 3 unit and 2 unit development

COST COMPONENT*	AMOUNT ALLOCATED PER DWELLING IN BLOCK OF THREE UNITS	AMOUNT ALLOCATED PER DWELLING IN BLOCK OF TWO UNITS
PROPERTY ACQUISITION (minimum 600m2 lot containing older style dwelling within 400 metres of CBD purchased for $450,000)	$150,000	$225,000
STAMP DUTY AND SOLICITORS FEES allow $18,000	$6,000	$9,000
PROFESSIONAL & COUNCIL FEES (contributions $32,000 per extra dwelling, professional fees $8,000 per unit, DA and CC fees $2,700 per unit)	$32,000	$26,700
DWELLING DEMOLITION COST (120m^2 single storey brick and tile dwelling @ $43.90 per m^2) no allowance for asbestos allowance of $5,000 for tip fees $10,500 total demolition cost and allowance	$3,500	$5,250
ONE OR TWO STOREY BRICK MULTI DWELLING UNIT 3 bedrooms, each 150m^2 ($1,585 – $1,705 per m^2)	$237,750 to $255,750	$237,750 to $255,750
DOUBLE GARAGE 45m^2 ($630 - $680 per m^2)	$28,350 to $30,600	$28,350 to $30,600
LANDSCAPING (150m^2 @$15m^2)	$750	$1,500
DRIVEWAYS / CONCRETE AREA (60m^2 @ $77.30m^2)	$4,600	$4,600
DEVELOPERS PROFIT 15%	$69,000 to $72,000	$80,000 to $83,000
INDICATIVE TOTAL COST PER UNIT	$530,000 TO $555,000	$620,000 TO $640,000

* Building costs based on Rawlinsons Australian Construction Handbook Edition 34 – 2016 for the Brisbane market. Council fees and charges based on Ballina Shire Council fees, professional fees based on estimates provided by local consultant. Additional cost items such as holding costs, interest on borrowings not included. Demolition costs at low cost end actual costs may exceed $20,000 depending on building being demolished.

The analysis in Table 24 indicates that it will be more viable to develop land for medium density housing purposes if densities are increased from 1 unit per 300m^2 of site area to 1 unit per 200m^2 of site area in 2016.

In the context of the Alstonville housing market, as of November 2016, where 3 bedroom brick and tile dwellings are still able to be purchased in the low $400,000 price range (43 Mellis Avenue $410,000 sold September 2016, and 53 Alston Avenue $405,000 sold October 2016) and villas close to town in the mid $300,000 range, it is doubtful whether it is currently economically viable to develop these new housing products. This may not always be the case as has been evidenced by the Ballina housing market which in 2016 supports the sale of new dual occupancy dwellings in the low to mid $600,000 price category.

6.3.3 Opportunities for the Expansion of Alstonville Village Boundaries

The potential to expand the current footprint of the Alstonville urban area in various directions has been examined.

6.3.3.1 Areas with low potential for expansion of Alstonville's urban area

An expansion of the urban area south of the Panorama Estate to the Bruxner Highway has been considered but is not supported due to the agricultural use of this land and potential hazards which include slope instability and bushfire risks.

Expanding the urban area north of Albert Street and Clare Street to Johnstons Road and west to Maguires Creek has been considered but is not supported due to its perceived higher environmental and agricultural value and the location of the sewerage treatment plant within this area.

Expanding the urban area west of Maguires Creek towards Wollongbar has also been considered. This area is not supported for urban use for reasons which include that it is beyond the natural village boundary provided by Maguires Creek, the area within 200 metres to 400 metres of the creek is also subject to environmental constraints including remnant big scrub vegetation, bushfire and landslip risk.

6.3.3.2 Areas with higher potential for expansion of Alstonville's urban area

Area 1 – Lot 1 DP 542662 Pearces Creek Road

The area immediately to the south of the Alstonville Adventist Retirement Village, Lot 1 DP 542662, Pearces Creek Road, in the same ownership as the village (Australasian Conference Association Ltd), has been considered in greater detail. Map 8 shows this area by red outline.

Lot 1 DP 542662 has an area of 2.023 hectares and is impacted by bushfire and landslip constraints. It is also designated as State Significant Farmland. The land is not currently used for agricultural purposes. The zoning of the land is 7(i) Environmental Protection (Urban Buffer) under the provisions of Ballina LEP 1987. This land was part of a larger parcel of land having an area of approximately 4 hectares which was the subject of a rezoning application in 2005. The rezoning application proposed to facilitate the construction of 56 self-care units.

Lot 1 DP 542662 is not used for agricultural purposes whereas the land which it adjoins, on part of its western side, consists of a macadamia nut plantation. It is considered the expansion of the Adventist Retirement Village in a southerly direction over Lot 1 DP 542662 based on its topography, non-agricultural use and its proximity to the retirement village may warrant further investigation.

The value of this land lies in the fact that through application of a residential zoning it may provide an opportunity to secure an upgraded link between the Adventist Village and the Alstonville urban area. The link could be reinforced through the landowner contributing towards the construction of a shared pathway including pedestrian / cycle bridge over Maguires Creek, street lighting and landscape beautification works on land opposite the site (to replace current footpath).

Having regard to topographical constraints (slope issues) and vegetation a conservative yield in the vicinity of 20[29] self-care dwellings has been estimated for this land in the event that it is rezoned. The final yield will need to be determined followed detailed design in accordance with the development standards contained within State Environmental Planning Policy (Housing for Seniors or People with a Disability) 2004.

29 Maximum density allowed is based on an FSR 0.5:1 as per the SEPP but is unlikely to be achieved due to site constraints.

It should be noted that the 7(i) Environmental Protection (Urban Buffer) zone applicable to the land, under the provisions of Ballina LEP 1987, which adjoins the Adventist Retirement Village, is required to be transitioned to an appropriate zone under the provisions of Ballina LEP 2012. This land was initially proposed to be zoned for Environmental Protection purposes by Council in 2012. As a consequence of the State Government's Northern Council's E Zone Review Process an environmental zone was unable to be applied at that time.

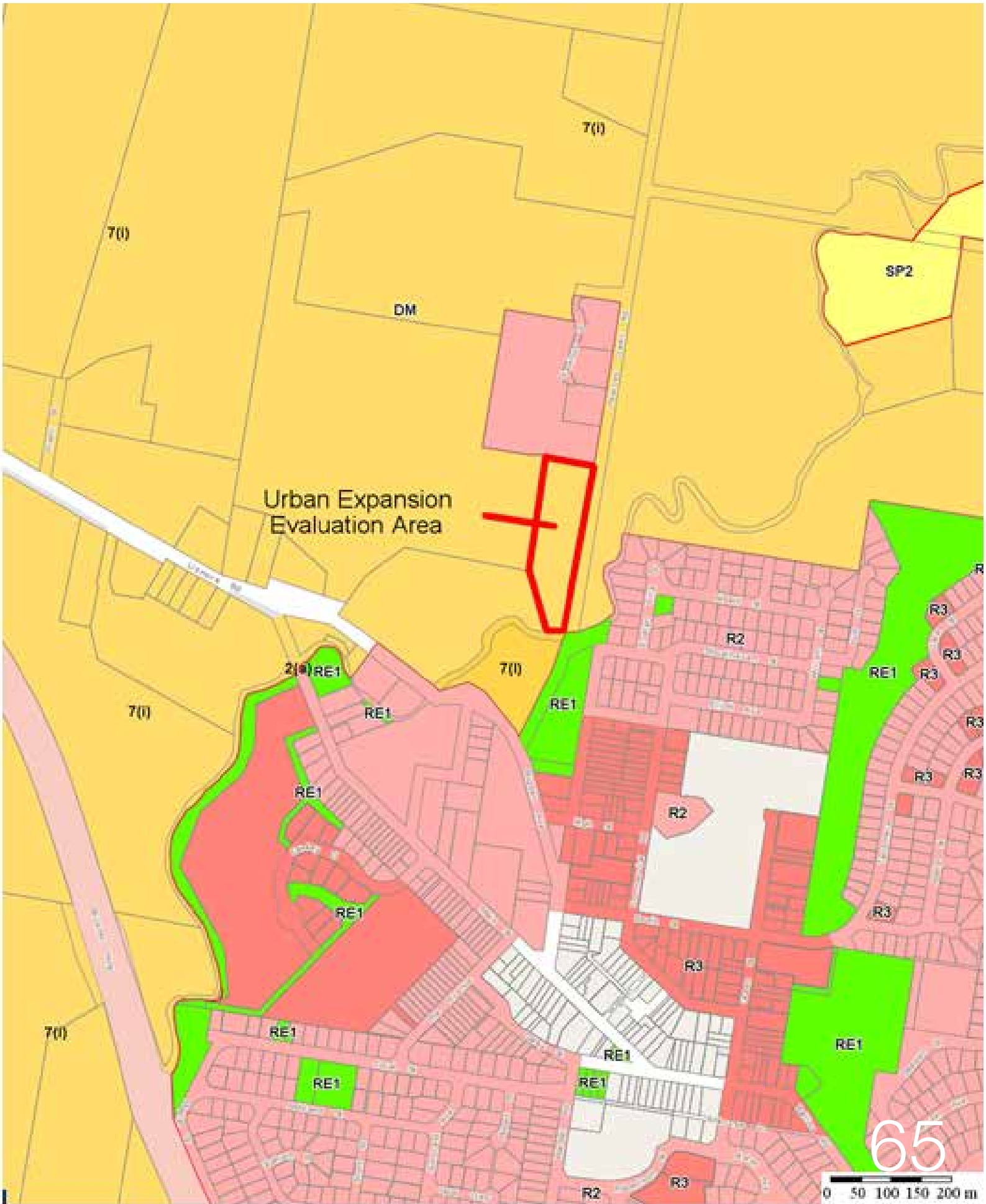
Council at its meeting on 27 April 2017 when giving consideration to the integration of environmental protection zones to suitable zones under Ballina LEP 2012 resolved to retain all deferred areas the subject of an environmental protection zone under the Ballina Local Environmental Plan 1987 as deferred areas (having the effect that the Ballina LEP 1987 will continue to apply).

View looking south–west across Lot 1 DP 542662 towards Maguires Creek

View of footpath opposite Lot 1 DP 542662 southerly direction towards Bugden Avenue, Alstonville

View of pedestrian bridge over Maguires Creek Lot 1 DP 542662

Map 8: Area 1 Alstonville village urban expansion evaluation area



Area 2 – North along Teven Road

An expansion in a northerly direction along Teven Road from the Panorama Estate may have longer term potential. This area is shown by red outline in Map 9. Area 2 occupies a total land area of approximately 75 hectares of which 38.3 hectares is Council owned land associated with the Tuckombil Quarry site and the adjoining hockey fields and nursery.

The area surrounding the quarry site is zoned 7(i) Environmental Protection (Urban Buffer) under the provisions of Ballina LEP 1987. The quarry site including the adjoining hockey fields and nursery are zoned 1(e) (Extractive and Mineral Resources) zone under the provisions of Ballina LEP 1987. The whole of this area including the quarry is designated as State Significant Farmland on maps produced for the Northern Rivers Farmland Protection Project in 2005. These zones and affectations impose a constraint to the rezoning of this land for urban purposes.

The nearest residential areas to the Tuckombil Quarry site are located approximately 200 metres to the west and 300 metres to the south of the quarry site. The quarry face at its north-eastern most point is located between 630 and 650 metres from the closest residential zoned properties. These distances provide a buffer to mitigate against potential amenity issues (noise, dust, smell and other hazards) associated with the quarry, bitumen plant and storage of hazardous materials. The location of the existing quarry, bitumen plant and hazardous material storage are additional constraints that would impact on the rezoning of this land for urban purposes.

Ballina Development Control Plan 2012 – Chapter 2 General and Environmental Constraints, Part 3, contains guidance regarding minimum required buffer distances for extractive industries and mining. A buffer of 500m is nominated or 1000m if blasting occurs[30].

This study has not considered the potential to reduce current buffer distances so as to enable an expansion of the existing urban area to take place in closer proximity to the quarry site. The position has been taken that for the life of the quarry, and while ever part of the site is being used as a bitumen plant and for hazardous material storage, existing buffers provided by non-residential zones will be maintained.

30 These buffer distances are based on the distances nominated in the NSW DPI publication Living and Working in Rural Areas, 2007.

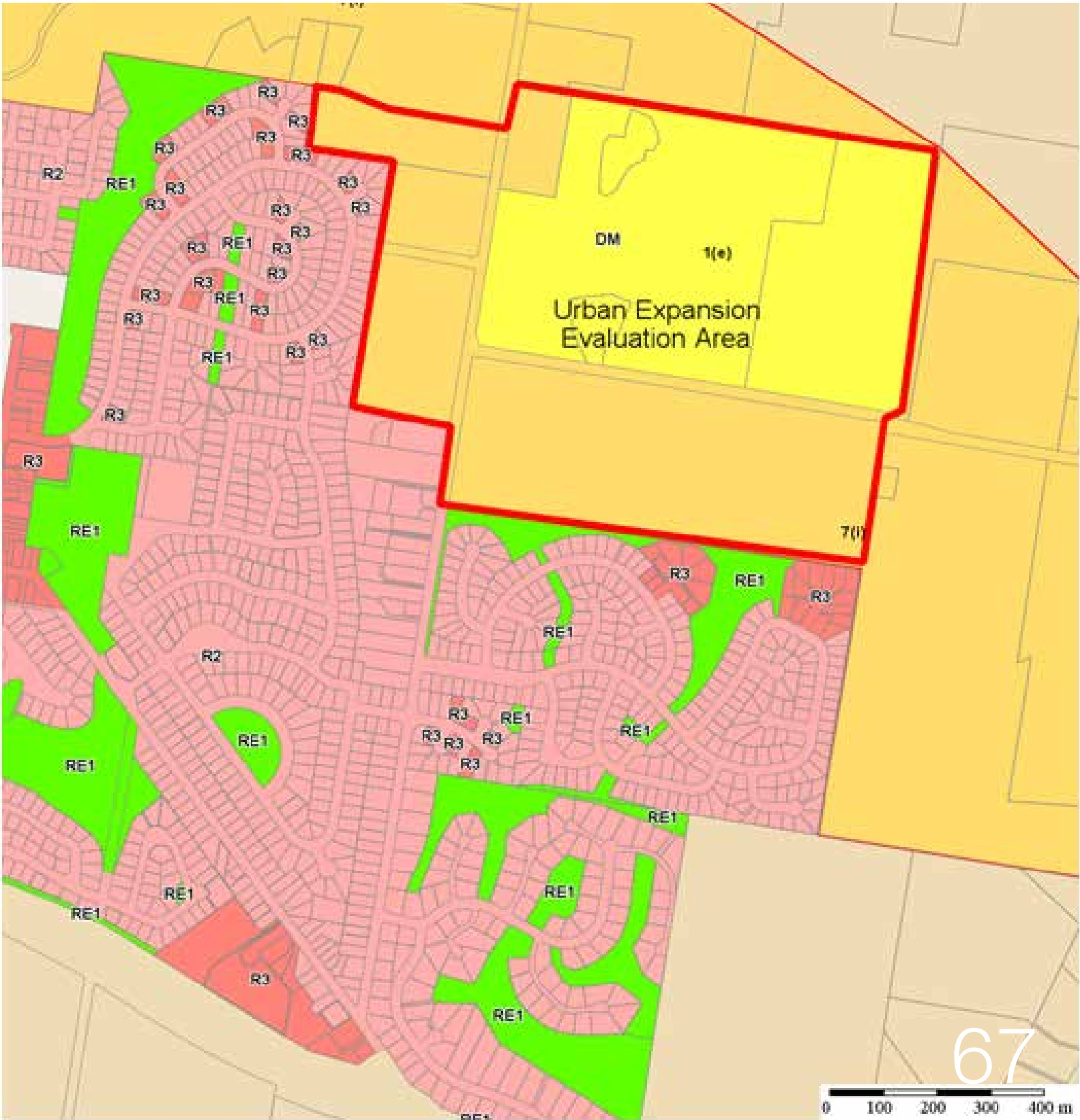
View looking south from Gap Road quarry entrance to Panorama residential estate

The quarry, if permitted to be expanded to the north and north-east, has a potential to provide extractive resources for approximately an additional 50 years as indicated below.

Subject to the closure of the quarry, and the use of part of the site as a bitumen plant and for the storage of hazardous materials ceasing, expanding Alstonville's urban area into the evaluation area shown on Map 9 appears to have long term merit. This is based on the close proximity of infrastructure (water, sewer and electricity) and the areas connectivity with existing residential areas. Private land holdings in this area total approximately 36.7 hectares. If the privately owned land were to be developed for housing, at a density of 15 dwellings per hectare, there is potential to yield up to 550 additional dwellings. This represents approximately 20% of Alstonville's 2011 housing stock.

There is currently a degree of uncertainty associated with the expansion of the Tuckombil Quarry given that the proposed EIS has not yet been documented (November 2016) and approvals for the quarries expansion have not yet been obtained. In this context and given the lease periods associated with the bitumen plant and hazardous materials storage facility, it is considered to be too early to designate this area as a potential growth location that would extend the footprint of Alstonville. This matter might be appropriate to revisit in ten years time having specific regard for the quarry operation and the population and housing circumstances in Alstonville and Ballina Shire more generally.

Map 9: Area 2 Alstonville village urban expansion evaluation area



Tuckombil Quarry Operating Life

The quarry has been in existence since about 1908[31] and the asphalt plant since 1978.

The quarry was operated by Lismore Council under lease from Ballina Shire Council until August 2016. All quarrying activities ceased on the site with the termination of the lease.

Located within the quarry site are two leased areas. One of these areas is being utilised by Boral Asphalt for the purposes of operating an asphalt batching plant pursuant to conditions contained within Development Consent DA1995/127. The lease term is a 5 year plus a 5 year option with the initial 5 year period expiring on 31 December 2019.

The second area is leased to Ron Southern for the purpose of storage and maintenance of drilling plant and equipment and the storage of hazardous materials. This use was approved in 1998 pursuant to the conditions contained within development consent DA1998/252. This lease is also a 5 year plus 5 year lease with the initial period expiring on 31 December 2019.

The operation of the quarry is governed by development consent DA1995/276. The development consent does not specify a maximum time period for the quarries continued operation. Condition 9 of the consent enables the extraction of a maximum of 450,000m^3 (1.3 million tonnes). In 2013 it was estimated that this specified extraction limit would be reached sometime in 2016[32]. At the time of preparing this report (November 2016) quarrying has ceased. It also still needs to be determined whether the material extraction limit contained within the development consent has been reached.

Ballina Shire Council at its Ordinary Meeting on 24 November 2016 resolved to prepare an Environmental Impact Statement and other planning approval documentation for the expansion of the quarry, to the north and north east, into areas currently partly utilised as sporting fields[33]. The Department of Planning and Environment has issued its requirements for the

Asphalt plant within Tuckombil Quarry Site

Tuckombil Quarry view towards north-eastern quarry face

31 Tuckombil Quarry Environmental Management Plan, Aspect North 2005, p2

32 Tuckombil and Stokers Quarry Evaluation and Strategic Options Report, Groundwork Plus2013, p30

33 Refer Report 11.4 to Ballina Shire Council Ordinary Meeting on 24/11/2016 [Minute No. 241116/36]

matters to be investigated through the EIS process should Council decide to pursue this quarry expansion proposal.

The proposed expansion of Tuckombil Quarry would occupy approximately 50% (18.6 hectares) of the land area on Lot 2 and Lot 4 DP1130300, as shown by the pink / purple boundary outline in the development plan contained within Diagram 35.

In 2013 estimates for the total basalt resource contained within the Tuckombil quarry site ranged from 9.8 million tonnes[34] to 17.3 million tonnes[35]. Based on 2013 extraction rates and a resource of 9.8 million tonnes this would extend the quarry life to 2083[36].

The report considered by the Council at its meeting on 24 November 2016 revised the resource estimate to 6.9 million tonnes and nominated a 50 year quarry operational period assuming the quarries expansion is approved.

34 Tuckombil and Stokers Quarry Evaluation and Strategic Options Report, Groundwork Plus2013, p30

35 Tuckombil and Stokers Quarry Evaluation and Strategic Options Report, Groundwork Plus2013, p30

36 Tuckombil and Stokers Quarry Evaluation and Strategic Options Report, Groundwork Plus2013, p30

Close up of quarries north-eastern face

Diagram 34: Leased Areas within Tuckombil Quarry site

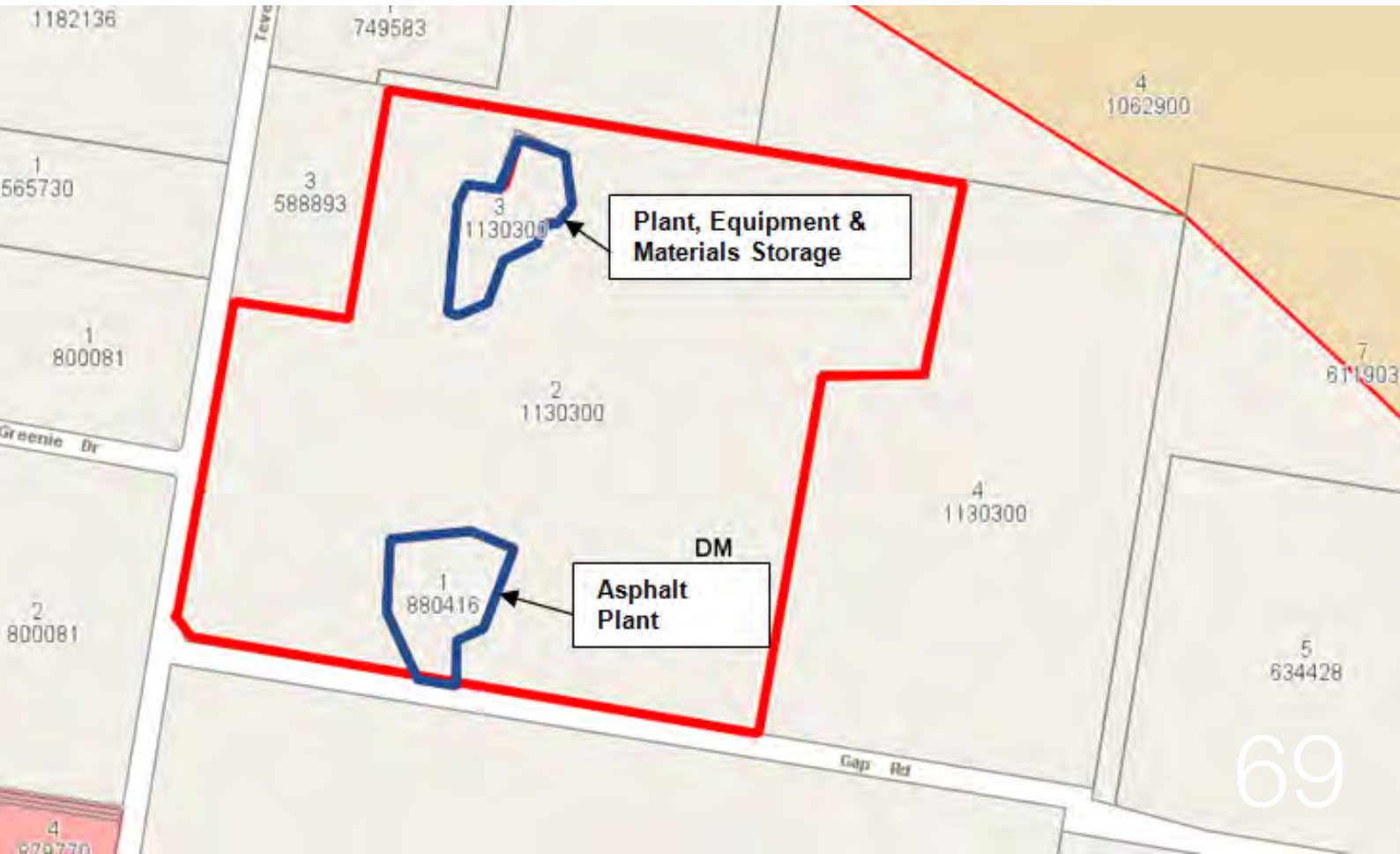


Diagram 35: Proposed Tuckombil Quarry Expansion Plan

proposed pit boundary

6.3.4 Summary impact of expansion options discussed in chapter 6

Chapter 6 has evaluated various scenarios to determine both the potential that exists within Alstonville's existing urban areas to accommodate additional dwellings as well as potential growth options. Subject to receiving community support the potential growth options could all be implemented in the short term (1 to 5 years). The realisation of lots within a Strategic Urban Growth Area within the buffer to the Tuckombil Quarry is considered to be at this stage a long term opportunity beyond the 20 year time period envisaged by the proposed Alstonville Strategic Plan. A summary of growth opportunities considered appears in Table 25.

Table 25: Alstonville Housing Growth Opportunity Impacts - Dwelling Yield and Population

OPTION	ESTIMATED TOTAL ADDITIONAL DWELLING YIELD	ESTIMATED TOTAL ADDITIONAL POPULATION IMPACT*	ESTIMATED ADDITIONAL DWELLINGS 2016 TO 2036**	ESTIMATED ADDITIONAL POPULATION INCREASE 2016 TO 2036
Development opportunities in existing zoned areas (current controls)	356 dwellings (includes Baptist Care Maranoa Village redevelopment additional 48 self-care units) + 356 dwellings	775 people	155 - 223	316 - 471
Decrease lot size in R2 area from 600m^2 to 450m^2	not known minimal impact estimated + 10 lots (dwellings)	25 people	10	25
Permit dual occupancy development on specific sites, sites with certain minimum lot sizes or throughout R2 zone	If permitted on sites with areas of 900m^2 or larger then an additional 500 sites have dual occupancy potential. This could result in an additional 250 dwellings. It is estimated that 25% or 125 sites will be developed over a 20 year period.	570 people	60	135
Rezone sites for Multi Unit Housing	+ 150 dwellings	340 people	38 - 75	87 - 171
Increase densities within R3 zone	+ 112 dwellings	260 people	28 - 57	64 - 130
Urban Area Expansion – Pearces Creek Road	+ 20 dwellings	30 people	20	30
TOTALS	+ 840 DWELLINGS	+ 1950 PEOPLE	301 - 445	637 - 962

* Includes additional 72 people estimated for Maranoa Village. Occupancy rate of 2.28 for dwellings, 1.5 for self -care dwellings in seniors development and 1 per bed within residential aged care facilities.
** Generally estimated 25% to 50% of R3 dwelling opportunities will be built in period 2016 to 2036

CHAPTER 7 VISION ELEMENT THREE ENHANCING VILLAGE CONNECTIVITY

7.1 Footpath access

Footpaths assist to provide safe access between residential areas and key community and commercial facilities. Footpaths are used by pedestrians, people in mobility scooters and in wheelchairs, and by people who push prams and shopping trolleys. All these users, whether old or young, increasingly seek to rely on a network of footpaths to provide safe and convenient access between where they live and the places they need to visits.

Alstonville's residential areas were established generally more than 30 years ago (Panorama Estate 1985) during periods when the provision of footpaths was not required as part of the subdivision approval process. It was not until the mid-1990s that pedestrian connectivity issues were actively considered as part of new subdivisions. As a consequence there are many areas not well serviced with footpath networks at Alstonville.

Council has addressed pedestrian access issues in the shire through the preparation of a Pedestrian Access and Mobility Plan (PAMP). The first PAMP was prepared, in 2004 and reviewed and updated in 2010 following community consultation. The PAMP contains a list of footpath projects, assigns a priority, provides a funding estimate and nominates an indicative construction period. The PAMP works are then incorporated into the Delivery Program associated with the annual budget process.

Feedback regarding footpath issues obtained from local residents, as part of the pre study community consultation, has been forwarded to Council's Road Safety Officer for consideration as part of the PAMP process. This included a suggestion regarding a footpath link to the Alstonville Cemetery.

In the 2016 / 17 financial year the Council allocated $2,070,000 to the construction of footpaths and shared paths (pedestrian and cycle) throughout the Shire. This amount included $1,700,000 for the Coastal Recreation Walk.

Council again reviewed the PAMP during 2016 to develop a list of footpath improvement works for the period 2017 to 2025. The PAMP review process has been communicated through advertisements in the Ballina and District Advocate newspaper, press releases, information displays and emails to interested residents. An information display was also available for viewing in Alstonville on 17 November 2016. It is anticipated that the Council will consider the PAMP in the first half of 2017.

ideas for improving footpath access

examine footpath and shared pathway provision which links key community and commercial facilities with residential estates through a strategic shared path upgrade and development planning process

develop a shared path strategy (pedestrian, cycling and mobility scooter) for Alstonville village

funding options to be considered over a 20 year period to 2036

7.2 Town square

Community suggestions to improve Alstonville's social connectivity and the "vibe" of Main Street have included the provision of a town square. A town square, it was suggested, could serve as a community hub and incorporate outdoor dining facilities serviced by adjoining and nearby cafes and restaurants.

There are no "obvious" suitable areas within Main Street that currently lend themselves for use as a town square. The following 3 sites were evaluated to provide an indication of some of the challenges inherent in establishing a town square in Main Street Alstonville:

- Freeborn Park, Corner Main and Daley Streets, Alstonville
- Part of 80 Main Street and adjoining section of Bugden Lane
- 70 to 74 Main Street corner Bugden Avenue, Alstonville

Freeborn Park, Corner Main and Daley Streets, Alstonville

The park and adjoining footpath areas occupy an area of approximately 960m^2. The footpaths are zoned B2 Local Centre and the park is zoned RE1 Public Recreation under the provisions of Ballina LEP 2012.

It is considered that Freeborn Park and the adjacent footpath areas have only limited value as a town square due to its end of centre location and topography. Permitting commercial operators to serve food and drinks to patrons sitting in the park may however have merit and warrant further investigation.

Diagram 36: Town Square opportunities – Freeborn Park

FREEBORN PARK AND ADJOINING FOOTPATHS

STRENGTHS

- already in Council ownership
- Council could facilitate legislative requirements to permit the serving of food and refreshments on community land
- a broad range of uses including restaurants and cafes are permitted with Council consent
- minimal conversion costs - site landscaped to a high standard and contains existing amenities building.

WEAKNESSES

- relatively small level area
- limited number of adjoining commercial premises
- site not centrally located
- limited overall value as a "vibe" site that could stimulate broader economic activity.

70 to 74 Main Street

This property is located on the corner of Bugden Avenue and Main Street and occupies a site area of 1530m^2. Erected on this property is a single storey timber building used as a hair and beauty salon. The property contains a large northerly facing yard area that may be suitable for outdoor dining.

Diagram 37: Town Square opportunities – 70-74 Main Street

70 - 74 MAIN STREET, ALSTONVILLE

STRENGTHS

- large north facing yard area
- adjoins commercial uses

WEAKNESSES

- on edge of commercial centre
- acquisition costs if proposed for public use

80 Main Street and adjoining section of Bugden Lane

The car park for the Alstonville Village Centre development, and the adjacent section of Bugden Lane, occupy an area of approximately 1000m^2. This land is zoned B2 Local Centre and is centrally located in the Alstonville commercial centre. Adjoining the site to the south is the heritage listed old Alstonville Post Office. The footpath area in front of the old post office building has already been landscaped and could also form a part of the town square proposal.

On balance and following evaluation of 3 sites, which were considered to have greater potential than other Main Street sites, it is considered that the 80 Main Street site has the greatest potential to serve as a vibrant town square. The likelihood of this site being utilised as a town square is however low. When considering the town square issue the capacity for Council to fund such a facility is also relevant. In the circumstances where few of Alstonville's streets have footpaths it may result that the provision of additional footpaths will be assigned a higher priority than a town square in the period to 2036.

Diagram 38: Town Square opportunities – 80 Main Street and adjoining Bugden Lane

80 MAIN STREET AND ADJOINING BUGDEN LANE (1000M^2)

STRENGTHS

- central location on Main Street
- removes an open car parking area with limited aesthetic appeal
- serviced by an existing pedestrian crossing
- adjacent to existing streetscape improvements and historic building
- site already partially in public ownership
- a potential "vibe" site in the centre of the CBD

WEAKNESSES

- majority of site in private ownership
- car parking relocation strategy required
- may not be supported by private property owners
- traffic management strategy and investigation required to determine impacts of Bugden Lane closure
- site contains 22 car parking spaces which if required to be relocated have a value of $335,896 based on 2016 Alstonville Village Centre Car Parking Contribution rate

CHAPTER 8
VISION ELEMENT FOUR
FOSTERING EMPLOYMENT OPPORTUNITIES

Information relating to economic activity within Ballina Shire contained within this chapter has been extracted from the *Ballina Shire Industry Sector Report – All Industries Economic Profile* prepared by economy.id which is contained within Appendix Four.

8.1 Economic activity – a Ballina Shire perspective

> "There will be an increase in the number of jobs on the basis of projected demographic growth but the really exciting possibility is that there may well be new jobs in fields we have hardly dreamt of, people with skills in other fields like information technology[37]"

It has been estimated that Australia has created 3.3 million jobs in the 10 years to 2015 whilst losing 300,000 jobs[38].

Ballina Shire has also experienced significant changes to the industries which provide employment. Diagram 39 shows graphically which industries have lost and gained employees within the Shire.

In total Ballina Shire lost 1000 jobs and gained 468 jobs in the five year period to 30 June 2015. Industries which lost jobs included Manufacturing (-445), Construction (-201), Health Care and Social Assistance (-191), and Agriculture, Forestry and Fishing (-64). Industries which gained jobs included retailing (+202), accommodation and food (+65), transport, postal and warehousing (+62) and public administration and safety (+57).

Examination of the change that has occurred, in the amount of value added per industry sector, provides an indication as to the relative productivity of each sector and changes in productivity over time. Diagram 40 shows that there have been significant positive changes in the amount of value added in the Agriculture, Forestry and Fishing, Retail Trade, Accommodation and Food Services, Rental, Hiring and Real Estate Services as well as Health Care and Social Assistance in the five year period to 30 June 2015.

Manufacturing has recorded significant reductions in total employment as well as value added in the five year period to 30 June 2015. This industry has been particularly badly impacted by reductions in exports (-$15.3 million pa) notwithstanding significant improvements in worker productivity (+$32,955 pa) and reductions in imports (-$43.4 million pa).

37 Professor Stephen Leeder, Chair Western Sydney Health Board, in Opening a window on Australia's job opportunities in the face of massive changes, Sydney Morning Herald, 6 September 2015

38 Bernard Salt, in Opening a window on Australia's job opportunities in the face of massive changes, Sydney Morning Herald, 6 September 2015

Diagram 39: Change in Ballina Shire employment by industry 2009/10 to 2014/15

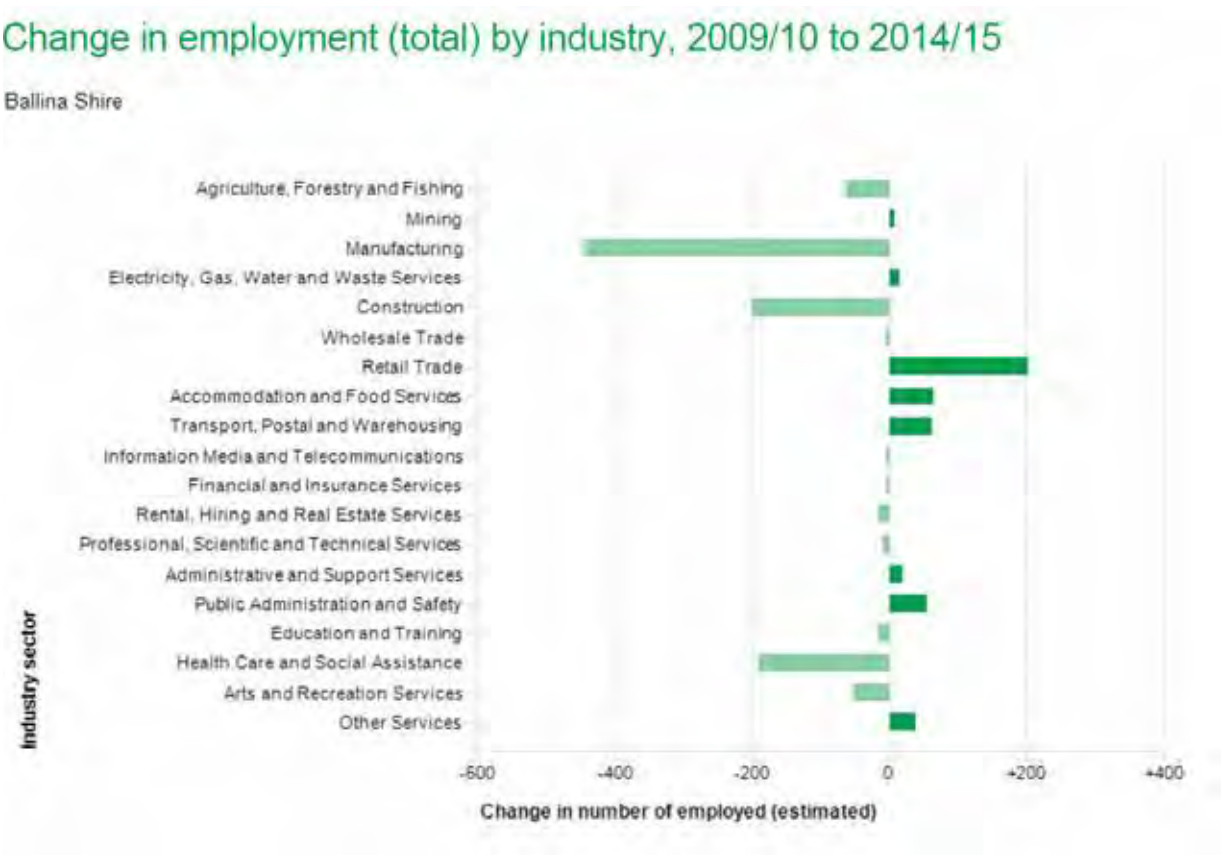
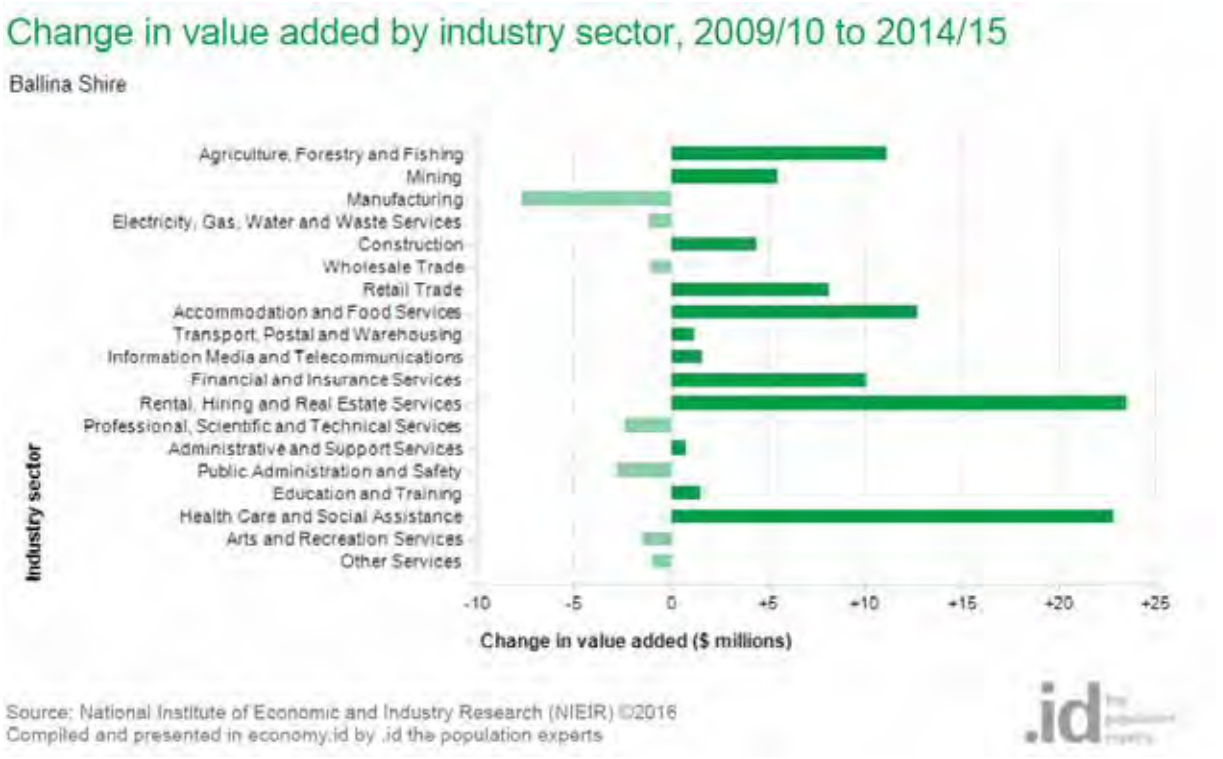


Diagram 40: Change in value added Ballina industry sectors



Industries which have recorded reductions in total employment as well as increases in the amount of value added have become more competitive as the productivity of their inputs (labour) has increased. An example of such an industry is Agriculture, Forestry and Fishing. This industry has reduced its total workforce by 64 people but increased the amount of value added by $11.1 million per annum in the five years to 30 June 2015.

In terms of worker productivity (or value added per employee) each worker within the Agriculture, Forestry and Fishing industry generated an additional $23,295 of value per annum in 2014/15 than was the case five years before. When compared to the average value added per Ballina Shire worker in this industry ($102,272) compared to the NSW average ($78,817) it indicates that Ballina Shire workers in this industry are significantly more productive.

Diagram 41 provides productivity per worker data by industry for 2014/15.

Greater productivity per worker provides a competitive edge when competing against other markets supplying the same commodity. Evidence for this is found in total export by industry sector data, contained in Diagram 42, which indicate that exports for Agriculture, Forestry and Fishing products have increased by $16.3 million or 13.5% in the five year period to 30 June 2015.

Data relating to economic output by destination for Ballina Shire compared to NSW, as shown in Diagram 43 indicates that economic output in Ballina Shire as at 30 June 2015 is still clearly focused on servicing the needs of the Shire.

Diagram 41: Productivity per worker by industry 2014/15

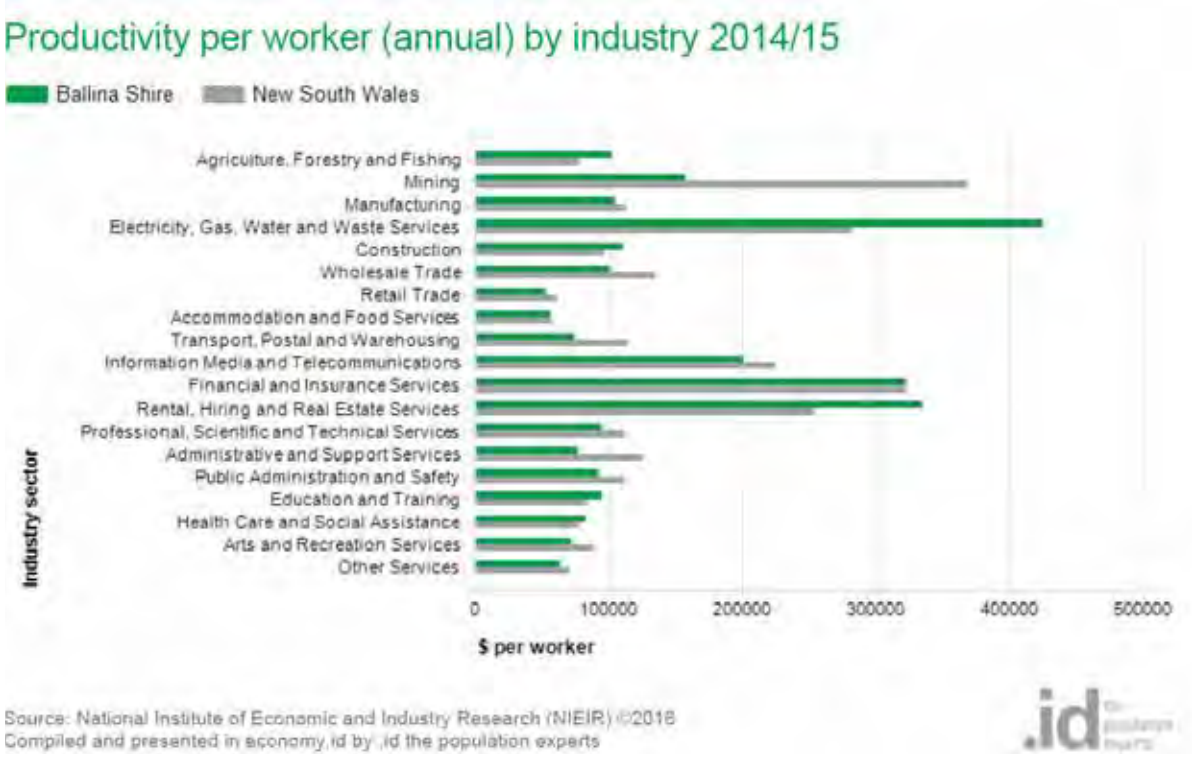


Diagram 42: Change in total exports by industry sector 2009/10 to 2014/15

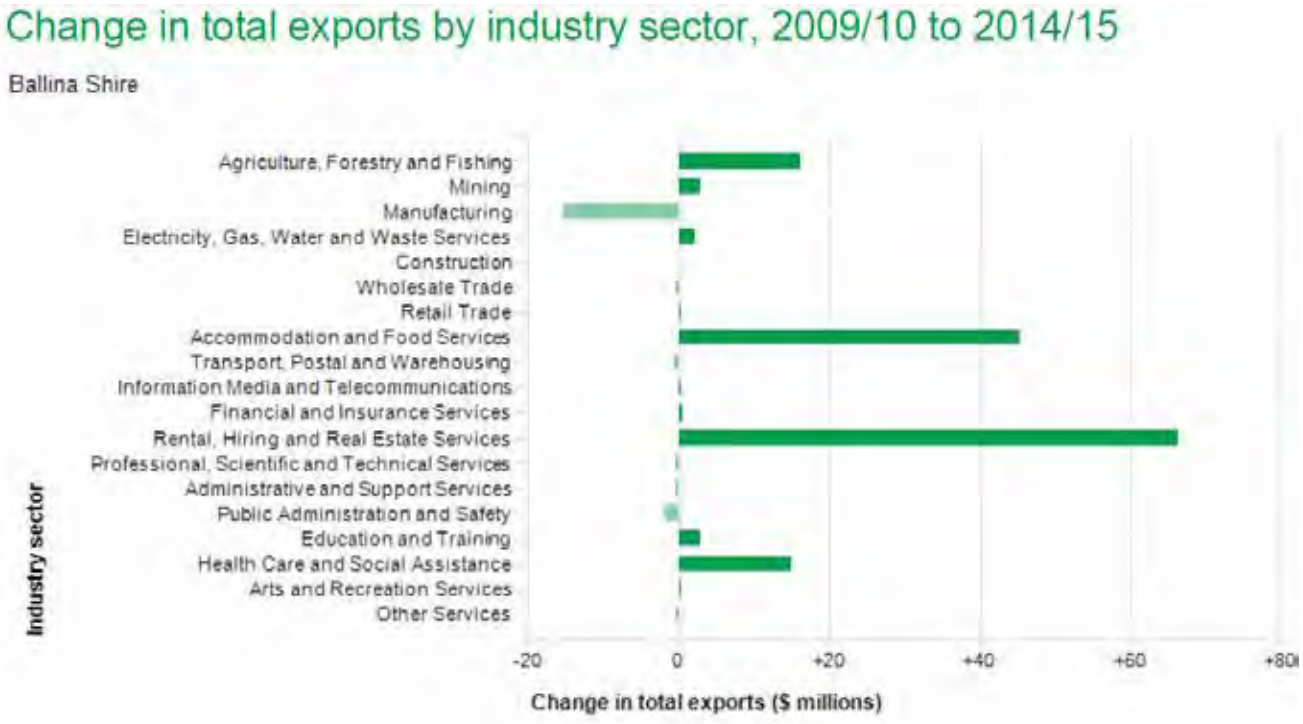
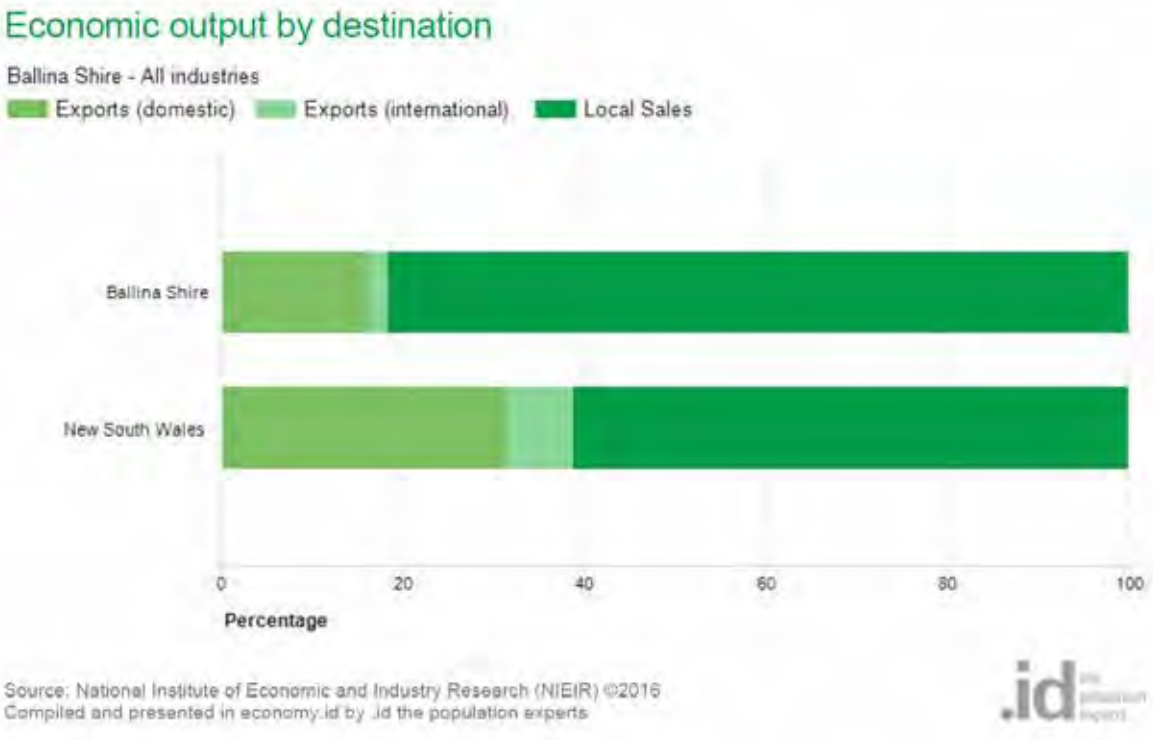


Diagram 43: Economic output by destination 2014/15



8.2 Fostering employment opportunities

The community survey undertaken during June and July 2016 indicated that the community valued the small village atmosphere, considered that agriculture was important for the region and that day tourism had potential to stimulate local economic activity.

In terms of household shopping more than 60% of respondents indicated that they did their general household shopping in Alstonville on the basis of shopping more than once per week. Coles was the most popular of the local shops followed by coffee shops, butchers, newsagent and the post office. Local shop keepers were perceived as friendly and helpful by their customers. This created a pleasant shopping experience for their customers, engendered customer loyalty and as a consequence made them more competitive with other centres.

The Alstonville shopping centre is divided into two distinct parts consisting of the Alstonville Plaza and the Main Street strip centre. Going forward it is envisaged that the Alstonville Plaza will continue to provide primarily for the general household shopping and service needs of the community. The Main Street strip centre is likely to increasingly focus on the tourist trade and act as a café, restaurant strip for both local residents and visitors.

The preservation and enhancement of Alstonville's historic buildings located on or near Main Street will assist to create a special historic village atmosphere which may be increasingly valued by day trip tourists. The challenge for local business operators relates to adopting and funding a unified marketing strategy which leverages local businesses with farm based tourism initiatives, currently existing and yet to be created. If this can be successfully done then Main Street Alstonville Village traders may realise significant economic benefits.

Rural land which surrounds Alstonville Village consists of some of the most productive agricultural land in NSW. It supports a variety of rural and agricultural pursuits including macadamia nut production, tropical fruit orchards, organic vegetable growing, cattle grazing, pig and free range poultry production. Chapter 10 examines in greater detail potential markets for these products. It is considered that agricultural production, when combined with farm tourism, has significant growth potential given increasing world demand for clean green products.

ideas for fostering employment opportunities within Alstonville village and surrounding rural land

prepare an integrated marketing strategy for Main Street Alstonville and the rural hinterland

review planning controls to ensure farm based tourism initiatives are permitted and development controls such as parking, setbacks and other design standards reflect intended outcomes

retail shop in Main Street, Alstonville

CHAPTER 9
VISION ELEMENT FIVE
MAINTAINING AND ENHANCING OUR ENVIRONMENT

9.1 National Landcare Program

The Australian Government through the Department of Environment and Energy and the Department of Agriculture and Water Resources administers the National Landcare Program (NLP). The program is anticipated to result in investment of $1 billion over a 4 year period to help drive sustainable agriculture as well as supporting, conservation and rehabilitation of Australia's natural environment.

Funding grants available through the NLP include Special Project and Community Land Care Grants, 20 Million Trees Program Grants, and Sustainable Agriculture Small Grants.

Landcare related grants are made available to Council's and Local Landcare Groups.

The Richmond Landcare Group is based in Alstonville. It acts as the umbrella and lobby group for 118 member groups and 3,000 individual landcarers located in the Richmond River Catchment.

The Bulwinkel Landcare Group is a member of the Richmond Landcare Group. It was formed in 2015 by members of the Tuckombil Landcare Group to assist Ballina Shire Council with the restoration of the Ken Dunston Tibouchina Garden, and to renovate Bulwinkel Park facilities, as well as removing weed species from the park's riparian zone and replacing them with native species.

The Big Scrub Landcare Group, based in Bangalow, has objectives relating to the rehabilitation of Big Scrub remnants and the planting of locally indigenous species on cleared Big Scrub land. A project being undertaken by this group relates to ecological restoration of Lowland Rainforest located along a 760 metre (7 hectare) section of Duck Creek at Alstonville.

Ballina Shire Council assists Landcare Groups through the provision of native trees, shrubs and mulch as well as training to meet relevant Workplace Health and Safety requirements. When Landcare Groups propose to undertake work on Council owned land then liaison and co-ordination with Council's Parks and Gardens staff is required. In some cases work undertaken will need to comply with vegetation management plans that have already been prepared.

Landcare Group members are local community volunteers who perform an extremely valuable

role in maintaining and enhancing local parks and reserves as well as riparian areas located on public and private land. In some cases professional bush regenerators are utilised to assist Landcare Groups when funding is available from Federal and State Government Departments.

The extracts in Diagram 44 from the Echo newspaper, 10 May 2016 and the Ballina Advocate on 14 December 2016, provide further examples of the valuable work undertaken by local Landcare Groups and the national recognition that this work receives.

landcare ideas

develop corporate sponsorship and individual philanthropic programs that provide opportunities to fund environmental restoration and enhancement works

invite keynote speakers to the Northern Rivers as part of significant festivals to provide inspiration and ideas for community based environmental restoration and enhancement projects, organic farming and permaculture

assist Landcare Groups to document projects and enhance their web sites to publicise achievements

Diagram 44: 2016 newspaper extracts

The Echo 10/5/2016

caring for Big Scrub

DR Tony Parkes, founder and president of Big Scrub Landcare, won the prestigious Banksia Award for Community Environmental Leadership at a special ceremony at the University of Sydney recently.

The Federal Minister for the Environment & Energy, Josh Frydenberg, each year awards an Australian who has shown inspirational leadership in caring for and nurturing our environment.

The prestigious Banksia Award recognises the tireless work of Dr Parkes.

"This award reflects the commitment of so many people including the regenerators, stakeholders and landowners who strive to protect what's left of our region's critically endangered lowland subtropical rainforest and its magnificent biodiversity," Dr Parkes said.

Big Scrub Landcare was founded in 1992 and is one of the largest Landcare groups in the country with over 400 members.

The Big Scrub Rainforest was once a vast sub-tropical rainforest covering 75,000 hectares from Lismore to Byron Bay, including areas within Ballina Shire. There is less than 1% remaining.

Ballina Advocate 14/12/2016

← Local News | May 10, 2016 | by The Echo

Quiet Alstonville creek restored by loving hands

Something is happening in the woods behind Alstonville, and it sounds like good news. Weeds are toppling, rainforest is sprouting, and a new group of landholders are finding out just what it takes to bring back their creek.

Samuels Creek, near Alstonvale. (supplied)

Known to locals as 'Samuels Creek', this small unnamed tributary of Maguires Creek trickles year- round off the Alstonville Plateau escarpment at Alstonvale.

The catchment was originally carpeted by a thick blanket of sub-tropical rainforest, but in the years since the felling of the Big Scrub Samuels Creek has gradually been overtaken by another kind of carpet: one of exotic plants such as Camphor Laurel and Privet.

Luckily for Samuels Creek, the nearby landholders on Wenga Drive in the west and Eltham Rd in the east are not easily dismayed.

Members of the Samuels Creek Riparian Restoration Landcare Group on the banks of Samuels Creek, Garry Binks and Meg Binks. (supplied)

Dotted through the canopy they could see large native rainforest trees, struggling to break free from the weeds. So, inspired by a desire to free these trees and return Samuels Creek to its former glory, the landholders formed the Samuels Creel Riparian Rainforest Restoration Landcare Group.

The Samuels Creek Landcare Group joined their local Landcare Network, met with other neighbouring groups working in nearby catchments, and contracted a professional bush regenerator to develop a site action plan to best attack the wall of weeds waiting on their back doorsteps.

CHAPTER 10 GLOBAL MEGATRENDS IMPACTING ALSTONVILLE'S FUTURE

Stefan Hajkowics, CSIRO Senior Principal Scientist – Strategy and Foresight, in his 2015 book Global Megatrends: Seven Patterns of Change Shaping Our Future, identified seven change patterns that he predicts will change the world over the next 20 years[1]. An article in news.com.au, **News Story - 7 Megatrends**, provides a summary of the 7 megatrends and their potential societal impacts:

The definition of a megatrend, according to Hajkowics, is

> "a profound trajectory of social, economic, environmental or technological change" that will express itself with "explosive impact"

The Planning Institute of Australia (PIA) defines a megatrend as a major shift in environmental, social, and economic conditions that will substantially change the way people live[2]. PIA has identified 9 megatrends that will shape Australia's future to 2111 in their paper **Through the lens: megatrends shaping our future**.

This chapter examines the seven megatrends identified by Hajkowics and applies an Alstonville future 2036 context as well as suggesting some response strategies for further community discussion and comment. Also examined is the Climate Change and Disaster Resilience Megatrend nominated by PIA.

1 Hajkowicz S, Global Megatrends: Seven Patterns of Change Shaping Our Future, CSIRO Publishing 2015

2 PIA, Through the lens: megatrends shaping our future – summary sheet

megatrend 1 more from less

Food production is estimated to require a 70% increase to meet demand. Increased food prices can lead to social instability.

Throughout the world 12 million hectares of productive agricultural land is lost each year to land degradation, over cultivation and deforestation.

Food distribution issues are seen as the problem as opposed to food scarcity.

Alstonville Village is surrounded by highly productive and valuable farmland of State and regional significance. In a world where significant agricultural land is lost each year, and demand for food is increasing, Alstonville is strategically placed to take advantage of this megatrend.

Adopting strategies that lead to the preservation of significant farmland may provide longer term economic benefits for the Alstonville community if it is also linked to a food distribution strategy. Such a strategy could focus on South- East Asia which is less than 9 hours flying time from the Ballina Byron Gateway Airport. An example of such a strategy is currently in practice in Stanthorpe, Queensland. Here a meat distribution company provides meat packs, ordered online to Southern China. These packs are claimed to arrive at their destination within 24 hours of being ordered.

Local markets for agricultural products are predicted to expand as a consequence of anticipated population

growth in South – Eastern Queensland to 2041. The draft South – East Queensland Regional Plan (Shaping SEQ) predicts that this region's population will grow by 76,000 persons each year to 2041[39].

The Brisbane market place, as a result of the completion of Pacific Highway upgrade works between West Ballina and Byron Bay, is now also within approximately 2 hours travel by road from Alstonville. This then provides opportunities for the marketing of agricultural and other products produced in Alstonville.

Growth strategies which provide for more intensive forms of residential development within Alstonville's existing urban footprint also respond to the opportunities provided by this megatrend by preserving farmland for agricultural production.

megatrend 2 going, going ... gone? loss of biodiversity

This megatrend relates to the pressure placed on natural ecosystems as the world population expands. In the Australian context the population is predicted to grow from 23.7 million in 2015 to 50 million between 2061 and 2111.

Restricting Alstonville's population growth to existing urban areas and preserving natural areas with higher biodiversity is a strategy through which we may limit our impact on natural ecosystems.

Macadamia nuts sourced from the Alstonville hinterland are used to produce cookies served on Cathay Pacific international flights

39 Draft South – East Queensland Regional Plan, October 2016, page 30

megatrend 3 the silk highway new market opportunities

Rapid growth in emerging economies in Asia, Latin America and Africa are predicted to create new markets and competition for our goods and services.

It is estimated that more than one billion people will shift from being poor to the middle income class in the Asian region. According to Austrade, Australia is recognised as having a clean and green environment with good quality products and brands[40].

Many Australian producers have already taken advantage of this competitive edge by established a position as suppliers of meat, dairy products, fresh fruits, seafoods and other products to the Chinese market[41].

The reduction in tariff barriers as a result of the China Australia Free Trade Agreement, effective from 20 December 2015, provides further opportunities for Australian primary producers to access the Chinese market place. These opportunities are also available to agricultural producers within the broader Alstonville locality and have the potential to drive economic activity within Alstonville Village.

megatrend 4 forever young, health and ageing

Globally the world's demography is ageing and life expectancy is increasing. The number of Australians aged 65 and over is projected to more than double by 2055 compared to 2015. This will have flow on implications for health services, labour market productivity and lifestyle in general according to PIA[42].

40 See **Austrade - Export markets - China**
41 See **Austrade - Export markets - China**
42 PIA, Through the lens: megatrends shaping our future – summary sheet

Alstonville's over 65 population has been predicted to increase by 22.5% in the period 2011 to 2036[43]. Alstonville's seniors living housing providers have current expansion plans to provide for this projected increase (Refer Chapter 2). Older Alstonville residents have expressed the view that insufficient housing choice is available to them particularly in close proximity to the village centre.

Older people are also able to work longer due to advances in health care and in some cases due to economic necessity. In Ballina Shire, during the period 2006 to 2011, the over 55 year old workforce increased by 37% or 880 people as shown in Diagram 45.

Beyond the provision of suitable housing this megatrend will require health care responses, and strategies aimed at keeping the population healthy for longer. Walking and cycling tracks, fitness paths, enhanced swimming facilities, together with various other exercise and healthy living opportunities will increasingly be demanded by local residents. In addition consideration of labour market issues will be required as an older age cohort continues to be part of the local labour market.

43 Forecast.id, Alstonville population forecast 2011 to 2036, see Annexure 3

megatrend 5 the growth of the virtual world

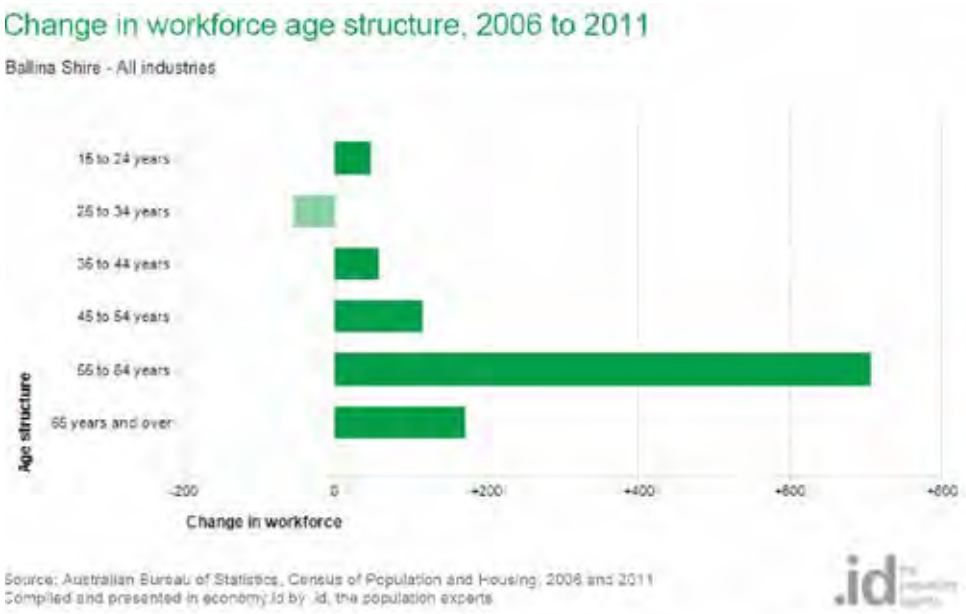
Business models and lifestyles are predicted change as a consequence of the growth of computing power. Retailing is predicted to undergo significant change. Retail stores which combine the physical store with a virtual presence are predicted to experience the most growth. More people will buy goods and services on line but it is also predicted that people will continue to visit shops for advice, services, experience and interaction with other people[44].

Retailing on line will increasingly be done by individuals who sell goods and services to a global market. Many jobs in mining, defence, aviation, logistics, administration and transportation are predicted to be replaced with robotics.

Ensuring that the Alstonville Village centre continues to differentiate itself from other retail centres, and consolidates its place as part of the "region of villages" in an increasingly virtual world will assist to ensure that

44 News.com.au, The seven global megatrends that could change our future, 10 June 2015

Diagram 45: Change in Ballina Shire workforce age structure 2006 - 2011



the centre prospers in the future. Shop uses that may assist to create a vibrant village atmosphere include cafes, restaurants, local food, and art and craft shops. Services that may be in demand in the future include health care, fitness, and beauty related services.

Alstonville is considered to be well placed to differentiate itself from other centres and maintain its village atmosphere. To do so, its considered it will need to maintain a focus on the preservation of its historic timber buildings and consolidate appropriate development within the existing urban footprint of the village.

megatrend 6 great expectations

It is predicted that people will become wealthier and there will be a shift away from the focus on the essentials of life with people focusing on experiences as opposed to material goods. A rise in discretionary expenditure is predicted, combined with the online world, this may see people craving experiences involving social interaction and emotional depth[45].

Alstonville has potential to become a significant tourist destination for day trippers from South – Eastern Queensland and nearby regional centres. Planning for a broader tourist experience which may include farm stay accommodation, road side stalls, farm gate produce supply and broader farm based tourism initiatives would assist in offering tourists a full day, or weekend experience, as opposed to a drive through visit. Responding to this trend may also require increases in accommodation opportunities, ranging from bed and breakfast to motel, within the village.

45 News.com.au, The seven global megatrends that could change our future, 10 June 2015

megatrend 7 the innovation imperative

Changes in regenerative medicine, the development of better batteries, and robots that do peoples jobs, amongst other advances, will change the way we live, work and play.

Responding to this megatrend will require local communities to continually adapt and change as a consequence of a world that is predicted to become more innovative. From a local planning perspective plans and policies will need to be regularly reviewed so as to be able to adapt to accelerated change processes at the broader community level.

megatrend 8 climate change and disaster resilience

PIA indicates that coastal settlements and urban fringe settlements will be particularly vulnerable to climate change effects[46].

The Bureau of Meteorology (BOM) **State of the Climate 2016 Report** forms Appendix 5 to this report. The key points of the report are as follows:

- Australia's climate has warmed in both mean surface air temperature and surrounding sea surface temperature by around 1 °C since 1910.
- The duration, frequency and intensity of extreme heat events have increased across large parts of Australia.
- There has been an increase in extreme fire weather, and a longer fire season, across large parts of Australia since the 1970s.
- May–July rainfall has reduced by around 19 per cent since 1970 in the southwest of Australia.
- There has been a decline of around 11 per cent since the mid-1990s in the April–October growing season rainfall in the continental southeast.
- Rainfall has increased across parts of northern Australia since the 1970s.
- Oceans around Australia have warmed and ocean

46 PIA, Through the lens: megatrends shaping our future – summary sheet

acidity levels have increased.

- Sea levels have risen around Australia. The rise in mean sea level amplifies the effects of high tides and storm surges.

The NSW Coastal Planning Guide: Adapting to Sea Level Rise specifies sea level rise planning benchmarks of an increase in sea levels above 1990 mean sea levels of 40cm by 2050 and 90cm by 2100[47].

The BOM State of Climate 2016 report indicates that sea level has risen between 1993 and 2013 at a rate of 2.6 - 2.9mm per year. Rates of sea level rise vary around Australia as indicated in Diagram 47. The Northern Rivers Region is within an area where sea level is estimated to increase at a rate of approximately 5mm per year.

The implication of a continuation of sea level increases into the future may be that at one point retreat strategies along the coast will require consideration. If this occurs then significant pressure will be placed on utilising higher level land on the plateau for residential relocation purposes. Based on currently available data the consideration of retreat strategies for the coastal fringe is well beyond the 20 year planning horizon for this study.

Changes in average mean daily temperatures across Australia have also been attributed to climate change. Many parts of Australia have recorded a trend of more days per year above 35^{0}C as shown in Diagram 48. The Northern Rivers Region has not recorded any significant trend changes according to the data displayed in Diagram 48 and obtained from BOM's State of Climate 2016 Report.

47 The NSW Coastal Planning Guide: Adapting to Sea Level Rise, August 2010, p 1

ideas for responding to megatrends

develop planning strategies that preserve significant farmland

investigate produce exporting opportunities

review planning controls to ensure they encourage rural tourism related activities including accommodation options

develop policies that provide for housing choice within the existing village urban area

plan for the connection of residential and commercial / community facilities through a network of footpaths, walking tracks and cycleways which incorporate fitness and exercise stations

protect Alstonville's historic timber buildings through appropriate planning strategies

review Council's Climate Action Plan in line with the release of the BOM State of Climate Report to ensure response mechanisms continue to be appropriate to climate conditions and changes

Diagram 46: Examples of rural area tourism initiatives

Rainfall

Changes in rainfall across Australia are displayed graphically in Diagram 49. The data indicates that the Northern Rivers Region is within an area that has recorded average to below average rainfall over the past 20 year period. Any significant variations to rainfall can negatively impact on agricultural production on the plateau.

In respect to heavy rainfall changes across Australia, BOM indicates that there is mixed evidence related to change. It indicates that a small portion of Australia received more rain from heavy rain days in the period 1950 – 2012. It notes that large variability in extreme rainfall, decade to decade, is also evident, with very wet events often associated with La Nina years .

BOM indicates that Australia's climate has warmed, in both mean surface air temperature and surrounding sea surface temperatures, by around 1 degree Celsius since 1910. The 2016 Paris Climate Agreement aims at limiting global temperature rise to below 2 degrees Celsius above pre-industrial levels.

In the past 20 years many parts of Australia have been more adversely affected by climate impacts than the Alstonville Plateau. It is not known whether this will be the case over the next 20 year period. Given the vulnerability of local ecosystems and agricultural production to predicted climate change impacts this issue needs to be kept under constant review and longer term planning strategies considered in the context of shire wide climate action plans.

A review of climate change models and their predicted impacts for the North Coast of NSW is contained in the NSW Office of Environment and Heritage publication North Coast Climate Change Snapshot. An extract from this publication which summarises projected climate changes for the near future (2020 to 2039) and far future (2060 – 2079) is contained in Diagram 50.

Suitable climate change response strategies for the plateau may include the encouragement of light weight timber construction for new dwellings. Such dwellings would relate well to Alstonville's historic past. They would also use less energy as a consequence of both the energy taken to produce the building materials and the lower energy requirements for cooling.

Diagram 47: Annual sea level rise estimates

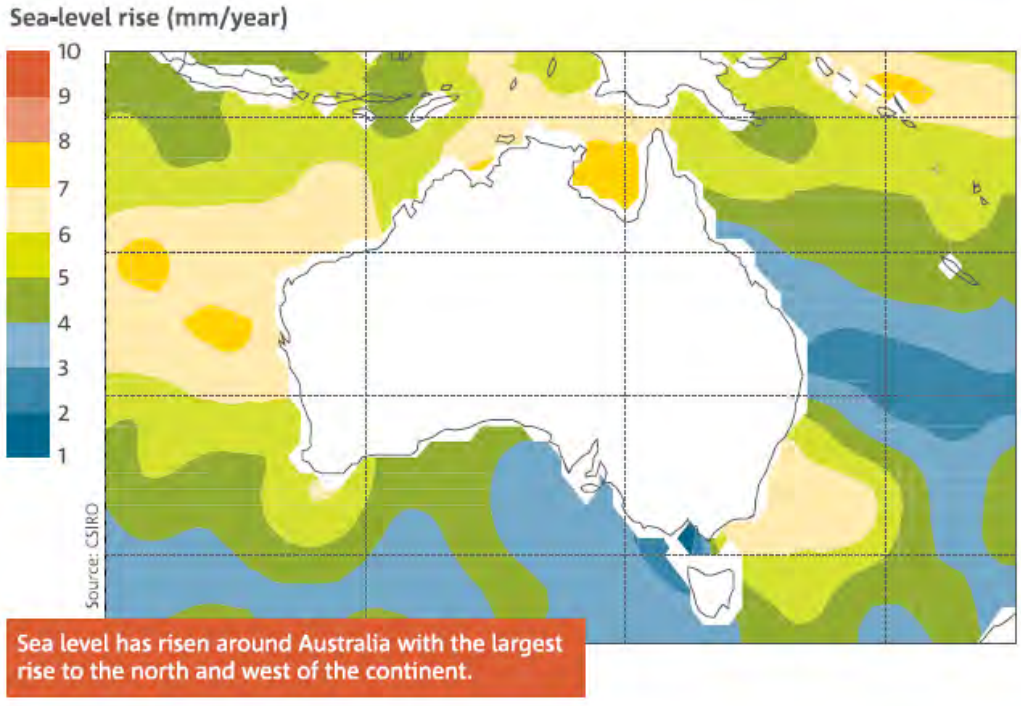


Diagram 48: Trend in days per year above 35°C

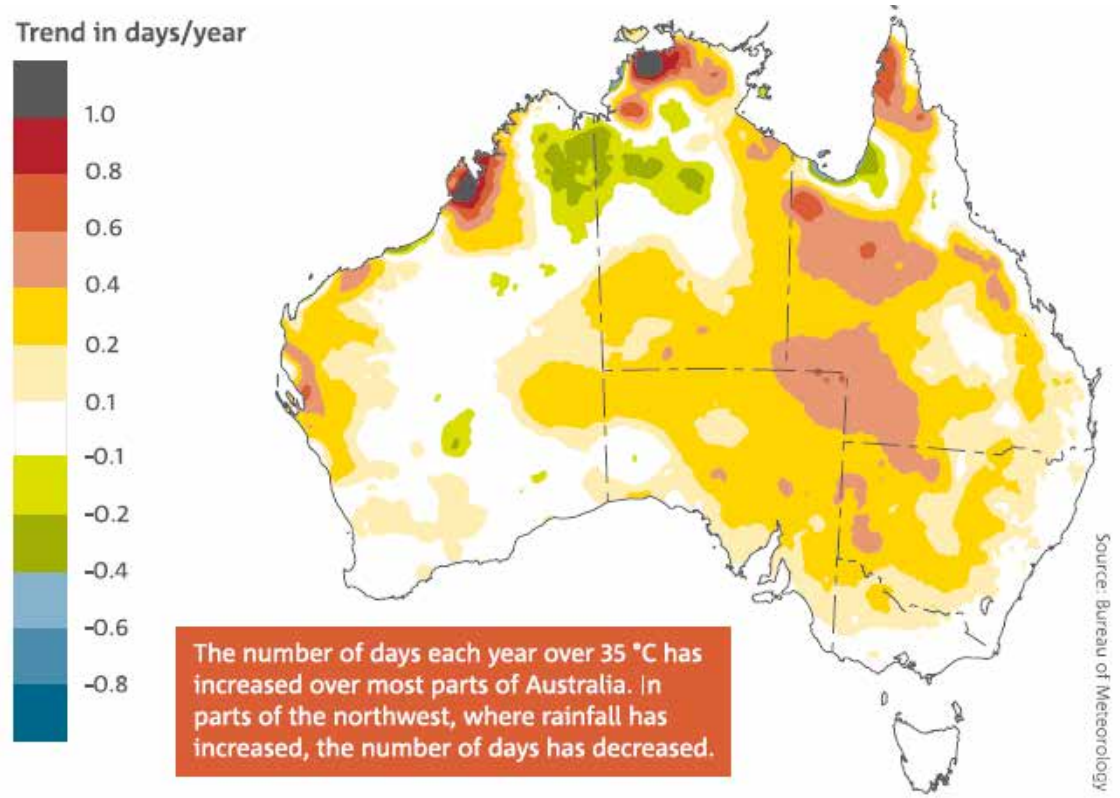


Diagram 49: Rainfall decile ranges 1996 - 2015

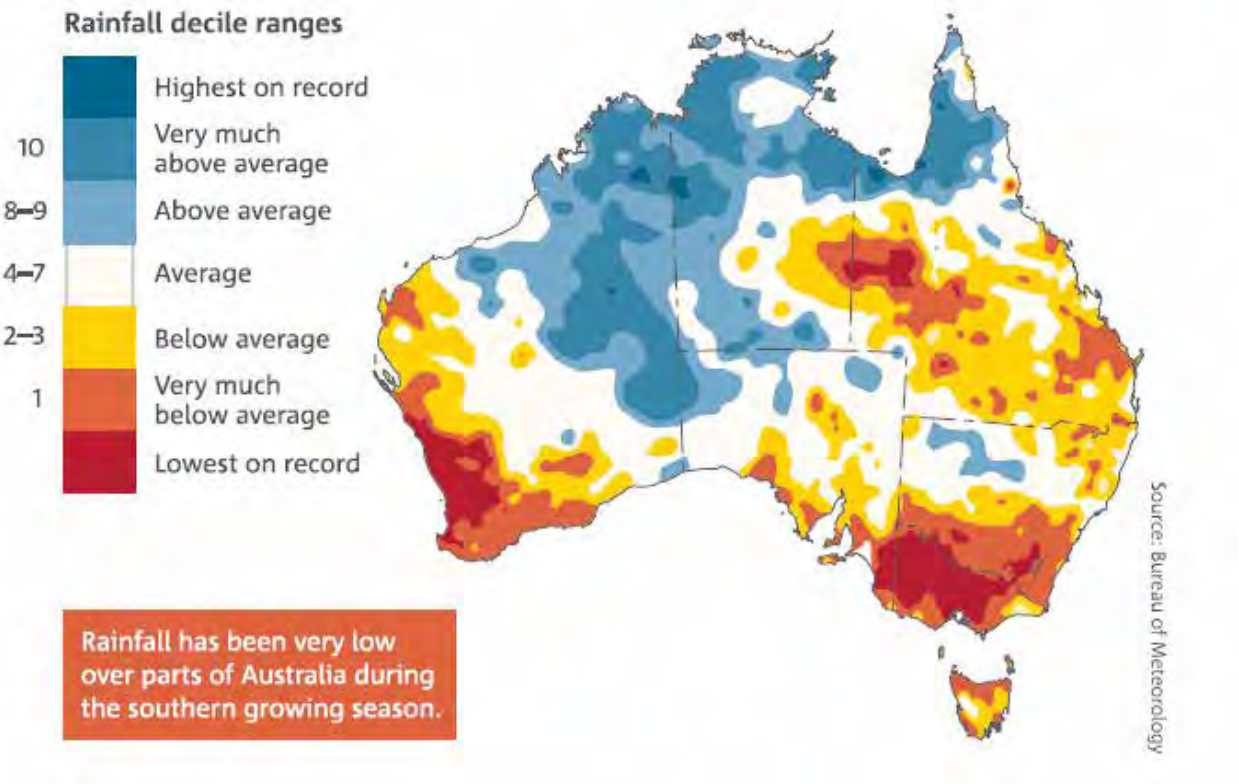
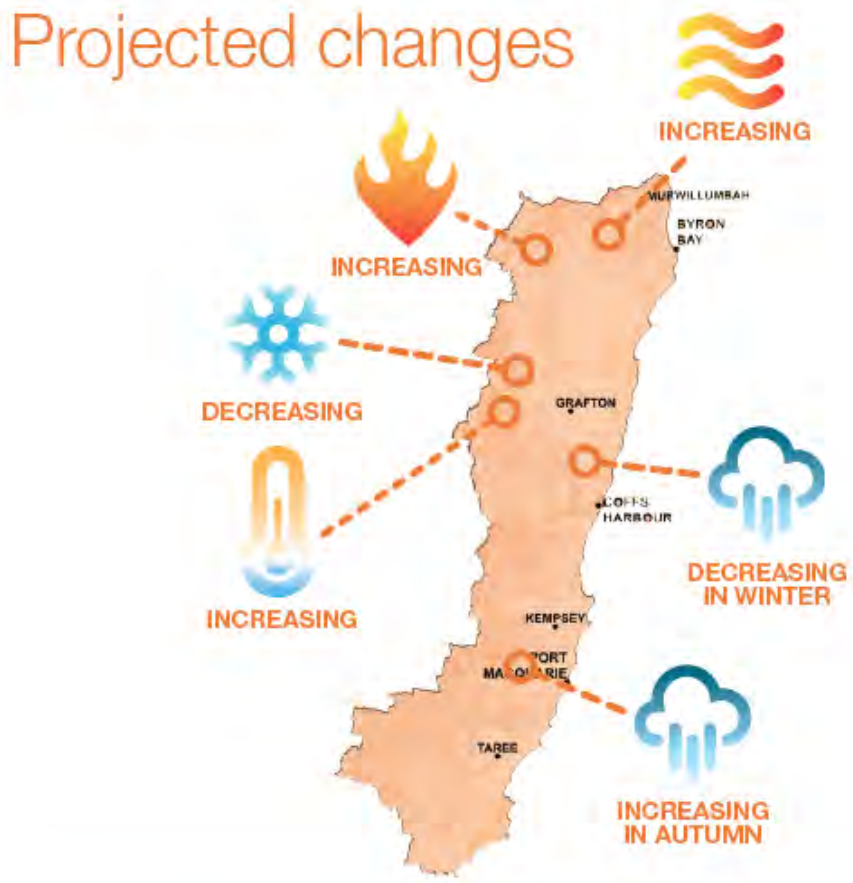


*Diagram 50: Projected climate changes NSW North Coast 2020 to 2039**



Projected **temperature** changes	
Maximum temperatures are projected to increase in the near future by 0.4 – 1.0°C	Maximum temperatures are projected to increase in the far future by 1.5 – 2.4°C
Minimum temperatures are projected to increase in the near future by 0.5 – 1.0°C	Minimum temperatures are projected to increase in the far future by 1.6 – 2.5°C
The number of hot days will increase	The number of cold nights will decrease
Projected rainfall changes	
Rainfall is projected to decrease in winter	Rainfall is projected to increase in autumn and spring
Projected Forest Fire Danger Index (FFDI) changes	
Average fire weather is projected to increase in summer and spring	Severe fire weather days are projected to increase in summer and spring

* OEH Adapt NSW - North Coast Climate change snapshot p3

CHAPTER 11 CONCLUSIONS - A WAY FORWARD

Population overview

In 1883 the first residential release of land in Alstonville resulted in the creation of 267 lots. By 1910 the population of Alstonville Village was 120 persons[1]. The target population of Alstonville Village has been reviewed a number of times from the 4500 envisaged by Tintenbar Council in 1975, to the 5000 people envisaged as a consequence of the implementation of Ballina LEP 1987.

Alstonville experienced rapid growth in the early 1980s with an annual growth rate of 11.92% recorded in 1981. However with the completion of residential subdivisions and associated building work the rate of growth had slowed to 4.3% per annum by 1995[2].

Main Street, Alstonville

In 1996 there were 142 vacant residential lots in Alstonville which at that time represented 2 years of land supply[3]. A 2016 survey found that only 24 vacant R2 zoned lots existed with very limited additional potential for subdivision of some larger lots. The unavailability of land for residential subdivision, and the lack of medium density housing products, has resulted in annual population growth reducing to +0.7% in the period 2001 to 2011 with predictions it will further decline to +0.27% in the period 2011 to 2036.

The number of people occupying each dwelling has also declined from 2.52 persons per dwelling in 1991 to 2.31 persons in 2011 with a further minor reduction to 2.28 persons per household predicted by 2036. This means we now need more dwellings to accommodate the same number of people.

In 2011 the population of Alstonville was 5606 people (estimated 5844 in 2016) and it has been predicted to increase to 6168 (Forecast. id modelling) people by 2036 assuming existing subdivision, development controls and zonings remain unchanged. This study has concluded that growth potential within the existing urban areas of Alstonville Village will result in a population of approximately 6160 to 6315 by 2036.

The total population growth potential under existing controls has been estimated to be 775 people (356 dwellings) which would result in a village population of approximately 6600 people when all currently available dwelling increase opportunities have been exhausted.

1 Commissioner W Simpson Commission of Enquiry Report as contained in report to Ballina Council Ordinary Meeting on 27 April 1995 p83

2 Ballina Shire Urban Land Release Strategy 1996, p33

3 Ballina Shire Urban Land Release Strategy 1996, p38

Alstonville's village size scenarios

There is nothing to prevent the Alstonville community from deciding that it does not support the growth of the village beyond the predicted 6600 population limit achievable under existing planning controls. The consequences of adopting a "No Growth" position may however include an increase in property prices, a reduction in the potential for people to locate in close proximity to family and friends, continued upward price pressure on the residential property rental market, and also no significant changes to housing choice options.

This study has identified a number of strategies to provide additional housing choice for Alstonville residents to 2036. Strategy options which are considered to have initial merit, subject to community consultation, consist of[48]:

- increasing permitted densities in existing R3 zones based on walking distance to commercial centre – additional 112 dwellings or 260 people
- further evaluate the merits of rezoning Lot 1 Pearces Creek Road (Adventist Village site) – additional 20 dwellings or 30 people
- permit dual occupancy on R2 zoned lots with areas of 900m^2 or more – up to 250 additional dwellings or 570 people if all sites developed but assumed only 25% of sites developed in 20 years – additional 60 dwellings or 135 people
- rezone identified R2 areas as R3 to permit multiunit housing – additional 150 dwellings or 340 people
- decrease lot size within R2 zone from 600m^2 to 450m^2 - estimated additional dwellings or 25 people.

The potential increase in population if all of the above policy options were implemented is approximately 1200 people. This would then result in Alstonville Village having a maximum population potential of approximately 7800 people (6600 under existing controls plus 1200) people.

It has been estimated that in the period 2016 to 2036 there is potential for opportunities for an additional 637 to 962 people or 301 to 445 dwellings to be created in Alstonville (see Table 25 on page 71). This equates to an annual population increase in the approximate range of 0.5% to 0.75%.

The creation of a third village on the plateau has not been examined in this study apart from a discussion of its historical context. It is considered that the imperative for a third village has reduced as a consequence of significant land releases in the shire at Cumbulam and Lennox Head. A third village remains a possibility, at some point in the future, once subdividable land within these areas has been consumed, and or if climate change induced sea level increases warrants the development of a retreat strategy for the flood plain.

If the Alstonville community accepts that its vision for the next 20 years is to incorporate:

> the creation of new housing opportunities that are affordable and provide choice for people to meet changing life needs

then it also follows that some or all of the above housing increase strategies, or others yet to be nominated, require consideration.

Enhancing village connectivity

Further residential growth in Alstonville Village should also be accompanied by an increase in the capacity of the community to connect in a physical and social sense. The provision of footpaths, cycle ways and walking trails will assist with the physical connection of the village. Increased pedestrian and cycle connection opportunities between outlying residential areas (Fairfield and Panorama Estates) and the commercial centre may also assist older residents to stay longer within their existing homes. It will also assist to create a healthier community.

Increased opportunity for social connection has also been explored through examining sites that may be suitable for a town square. A town square is a desirable long term goal. It is however not considered to be achievable in the period to 2037 due to the costs associated with such a proposal and higher priority infrastructure projects that will arise such as those relating to pathway construction.

48 Refer Table 25 of this study

Employment opportunities

The available data indicates that in 2011 Alstonville had a low unemployment rate (3.8%) well below the shire average and below NSW State and National levels. The data also suggest that most of the jobs available to Alstonville residents were within an approximate half hour driving time of the village (92%). Alstonville residents in 2011 were therefore considered to have good access to jobs.

Job availability can however change (2001 - 8.5% unemployment rate) and it is important that opportunities for local job creation be maintained and enhanced over the next 20 year period. The suggested strategy to achieve this relates in part to marketing Alstonville's small village atmosphere and its Main Street business as a tourist destination. This should occur in tandem with the development of policies that create additional tourist destinations within the rural hinterland. Opportunities such as farm based tourist accommodation, road side stalls, farmers trail and farmers and craft markets all warrant further examination.

This study has also explored the potential local impact of a predicted global megatrend relating to the growth of the Asian middle class and its demand for "clean green" products. The Alstonville hinterland has significant potential to market products direct to Asia utilising the air transport link potential provided by Ballina Byron Gateway Airport. Ballina Shire agricultural production has been shown to have become more efficient and competitive in the period 2009/10 to 2014/15. This then provides an additional competitive edge alongside productive soils, a more stable climate and the availability of air transport. There is therefore significant potential for agricultural employment opportunities to be created in the period to 2036 in the Alstonville hinterland.

Ideas contained within the Alstonville Planning and Environmental Study have been incorporated into the Alstonville Strategic Plan 2017 - 2037. These listed actions represent Council's proposed approach to the strategic planning framework for Alstonville to 2037.

Main Street, Alstonville, February 2017

ANNEXURES

Annexure 1 Extract from Ballina Shire Growth Management Strategy

Alstonville

Locality Vision / Character Statement:

Alstonville has a strong village character, associated with the following features:

- *its built heritage and the presence of a number of older timber buildings which significantly contribute to the village streetscape;*
- *its compact and enclosed layout providing a "user friendly" environment;*
- *its small buildings and modest architecture and its residential scale;*
- *the influence of well established parks and street trees throughout the area;*
- *its links with and proximity to Lumley Park and Bulwinkel Park and other places of community, cultural and recreational interest;*
- *its interface with scenic and highly productive agricultural land.*
- *its setting within a post-European rural landscape; and*
- *its elements of the built and landscaped environment which demonstrate its beginnings, growth and change.*

Main Features:

- The village comprises a central commercial area surrounded by low density residential areas.
- Networked open space areas and centrally located historic showground reinforce the character of the locality as a low density village.
- Other land uses include schools, recreational facilities and aged care facilities. A number of government agencies operate out of offices in Alstonville.
- Proximity to and strong relationship with the village of Wollongbar, the Russellton Industrial Estate, the Gap Road Quarry and NSW Department of Primary Industries Agricultural Research Station.
- The village is effectively 'built-out' to the village footprint identified by Ballina Shire Council and the Far North Coast Regional Strategy.
- The village is surrounded by a 'rural buffer', designated by Council to preserve the distinctiveness and separation of Alstonville and Wollongbar.
- Recent implementation of village centre enhancement plan.

Key Issues:

- Growth boundary ('rural buffer') established by Council in the 1980s and reinforced by the FNCRS 'town and village footprints' seeks to maintain the 'village atmosphere' and scale of Alstonville.
- Limited potential for further outward expansion of the village, and the declining occupancy rate of the village (that is, declining household size) over time means that the population of Alstonville may stabilise and could decline over time, without a higher rate of infill development occurring.
- The present lack of housing diversity (predominance of single detached dwellings) suggests that there may be a shortage of housing options in the future which could allow residents to remain in Alstonville as they age and need to 'downscale' their dwelling, in terms of aged care.
- Bruxner Highway Bypass has had positive benefits relating to improvements to the amenity of the village centre, which may encourage tourist and other commercial activity over time.
- Surrounding agricultural land is recognised, by the NSW State Government's Northern Rivers Farmland Protection Project 2005, as State and regionally significant farmland.
- A number of historic (public and private) buildings are formally listed as items of environmental heritage on Council's Local Environmental Plan, which are important to maintaining the village's recognised and valued historic character.

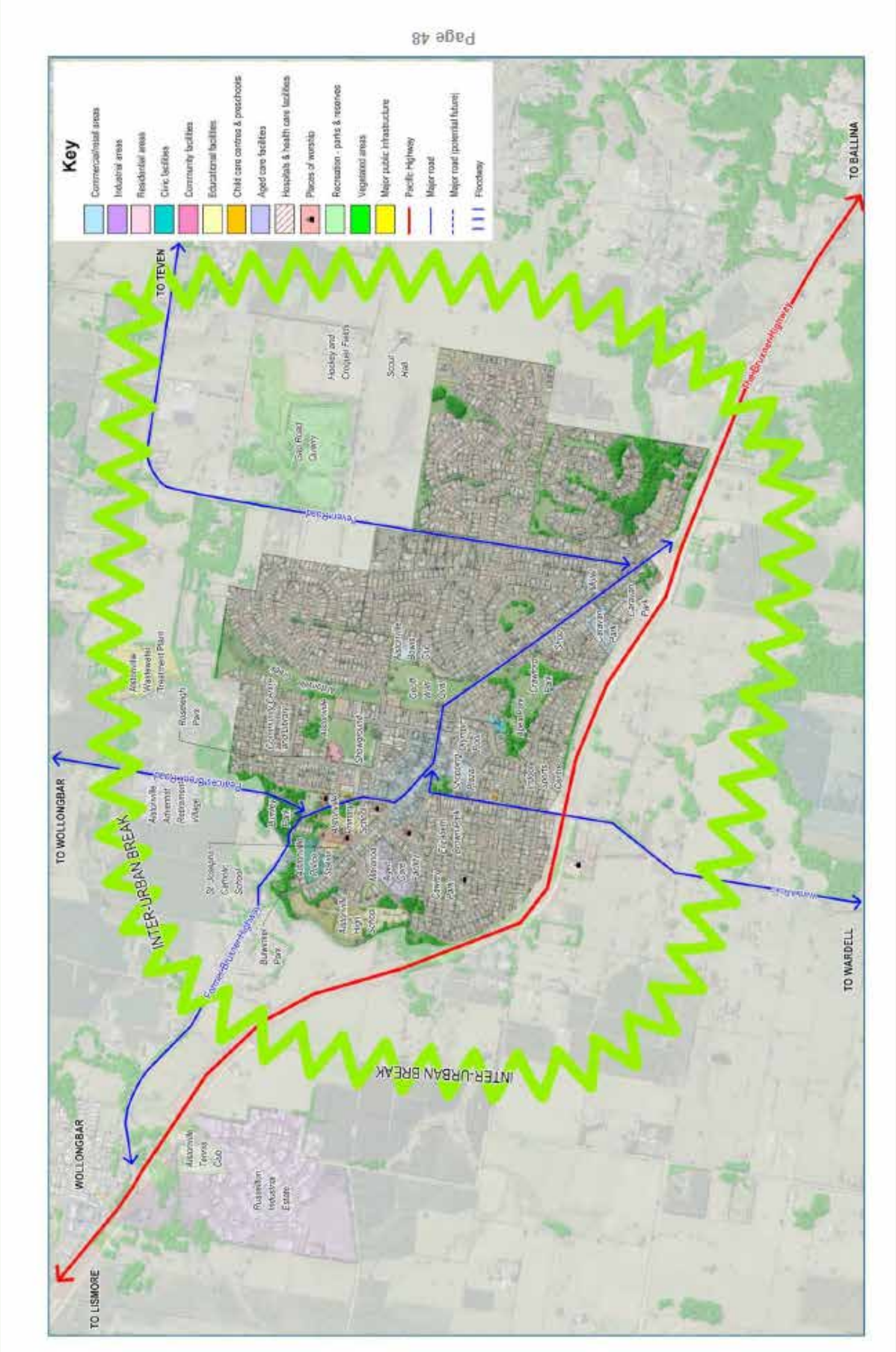
Locality Objectives:

- Maintain the village 'scale' and 'character' of Alstonville.
- Retain the village footprint.
- Accommodate further infill development in a manner that is sensitive to the village character and heritage values.
- Provide for changing housing needs.
- Manage Aboriginal, European and other non-Aboriginal cultural heritage values in accordance with best practice guidelines.

Strategic Actions:

- Identify opportunities for additional seniors living facilities.
- Investigate the potential for infill development intensification.
- Review planning controls for village centre following construction of the Bruxner Highway bypass.
- Preserve the integrity of the village footprint.
- 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 47


Page 48
Key
Commercial/retail areas
Industrial areas
Residential areas
Civic facilities
Community facilities
Educational facilities
Child care centres & preschools
Aged care facilities
Hospitals & health care facilities
Places of worship
Recreation - parks & reserves
Vegetated areas
Major public infrastructure
Pacific Highway
Major road
Major road (potential future)
Floodway
TO TEVEN
TO BALLINA
TO WOLLONGBAR
TO LISMORE
TO WARDELL
INTER-URBAN BREAK
INTER-URBAN BREAK
WOLLONGBAR

Annexure 2 BioNet Atlas of NSW search results

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)
FKTP	Key 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)

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 Threatened (Listed on TSC Act 1995) or Commonwealth Listed Entities in selected area [North: -28.78 West: 153.39 East: 153.49 South: -28.88] returned a total of 310 records of 46 species.
Report generated on 17/11/2016 10:28 AM

Kingdom	Class	Family	Species Code	Scientific Name	Exotic	Common Name	NSW status	Comm. status	Records	Info
Animalia	**Aves**	**Anseranatidae**	**0199**	***Anseranas semipalmata***		**Magpie Goose**	**V,P**		**1**	
Animalia	Aves	Columbidae	0025	*Ptilinopus magnificus*		Wompoo Fruit-Dove	V,P		4	
Animalia	**Aves**	**Columbidae**	**0021**	***Ptilinopus regina***		**Rose-crowned Fruit-Dove**	**V,P**		**15**	
Animalia	Aves	Columbidae	0023	*Ptilinopus superbus*		Superb Fruit-Dove	V,P		1	
Animalia	**Aves**	**Ciconiidae**	**0183**	***Ephippiorhynchus asiaticus***		**Black-necked Stork**	**E1,P**		**3**	
Animalia	Aves	Accipitridae	0218	*Circus assimilis*		Spotted Harrier	V,P		10	
Animalia	**Aves**	**Accipitridae**	**0223**	***^Erythrotriorchis radiatus***		**Red Goshawk**	**E4A,P,2**	**V**	**2**	
Animalia	Aves	Accipitridae	0225	*Hieraaetus morphnoides*		Little Eagle	V,P		6	
Animalia	**Aves**	**Rallidae**	**0053**	***Amaurornis moluccana***		**Pale-vented Bush-hen**	**V,P**		**1**	
Animalia	Aves	Tytonidae	0252	*^^Tyto longimembris*		Eastern Grass Owl	V,P,3		1	
Animalia	**Aves**	**Campephagidae**	**0428**	***Coracina lineata***		**Barred Cuckoo-shrike**	**V,P**		**1**	
Animalia	Aves	Artamidae	8519	*Artamus cyanopterus cyanopterus*		Dusky Woodswallow	V,P		5	
Animalia	**Mammalia**	**Dasyuridae**	**1008**	***Dasyurus maculatus***		**Spotted-tailed Quoll**	**V,P**	**E**	**4**	
Animalia	Mammalia	Dasyuridae	1045	*Planigale maculata*		Common Planigale	V,P		2	
Animalia	**Mammalia**	**Phascolarctidae**	**1162**	***Phascolarctos cinereus***		**Koala**	**V,P**	**V**	**99**	
Animalia	Mammalia	Macropodidae	1234	*Thylogale stigmatica*		Red-legged Pademelon	V,P		2	
Animalia	**Mammalia**	**Pteropodidae**	**1280**	***Pteropus poliocephalus***		**Grey-headed Flying-fox**	**V,P**	**V**	**20**	
Animalia	Mammalia	Vespertilionidae	1346	*Miniopterus australis*		Little Bentwing-bat	V,P		1	
Animalia	**Mammalia**	**Vespertilionidae**	**1334**	***Miniopterus schreibersii oceanensis***		**Eastern Bentwing-bat**	**V,P**		**1**	
Animalia	Mammalia	Vespertilionidae	1357	*Myotis macropus*		Southern Myotis	V,P		1	
Animalia	**Mammalia**	**Vespertilionidae**	**1336**	***Nyctophilus bifax***		**Eastern Long-eared Bat**	**V,P**		**1**	
Animalia	Insecta	Carabidae	1009	*^^Nurus atlas*		Atlas Rainforest Ground beetle	E1,3		1	
Animalia	**Insecta**	**Noctuidae**	**8021**	***Phyllodes imperialis southern subspecies***		**Southern Pink Underwing Moth**	**E1**	**E**	**1**	
Plantae	Flora	Apocynaceae	1233	*Marsdenia longiloba*		Slender Marsdenia	E1,P	V	1	
Plantae	**Flora**	**Apocynaceae**	**1176**	***Ochrosia moorei***		**Southern Ochrosia**	**E1,P**	**E**	**9**	
Plantae	Flora	Asteraceae	6943	*Blumea lacera*			E4,P		1	
Plantae	**Flora**	**Euphorbiaceae**	**9466**	***Acalypha eremorum***		**Acalypha**	**E1,P**		**2**	
Plantae	Flora	Euphorbiaceae	8325	*Baloghia marmorata*		Jointed Baloghia	V,P	V	6	
Plantae	**Flora**	**Fabaceae (Faboideae)**	**3030**	***Sophora fraseri***		**Brush Sophora**	**V,P**	**V**	**2**	
Plantae	Flora	Fabaceae (Mimosoideae)	7757	*Archidendron hendersonii*		White Lace Flower	V,P		5	
Plantae	**Flora**	**Lauraceae**	**3477**	***Cryptocarya foetida***		**Stinking Cryptocarya**	**V,P**	**V**	**1**	
Plantae	Flora	Lauraceae	3491	*Endiandra hayesii*		Rusty Rose Walnut	V,P	V	1	
Plantae	**Flora**	**Lauraceae**	**8480**	***Endiandra muelleri subsp. bracteata***		**Green-leaved Rose Walnut**	**E1,P**		**2**	
Plantae	Flora	Meliaceae	3082	*Owenia cepiodora*		Onion Cedar	V,P	V	1	
Plantae	**Flora**	**Menispermaceae**	**7167**	***Tinospora smilacina***		**Tinospora Vine**	**E1,P**		**1**	
Plantae	Flora	Menispermaceae	3691	*Tinospora tinosporoides*		Arrow-head Vine	V,P		46	
Plantae	**Flora**	**Myrtaceae**	**11894**	***Gossia fragrantissima***		**Sweet Myrtle**	**E1,P**	**E**	**2**	
Plantae	Flora	Myrtaceae	4290	*Syzygium hodgkinsoniae*		Red Lilly Pilly	V,P	V	18	
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	
Plantae	**Flora**	**Poaceae**	**4776**	***Arthraxon hispidus***		**Hairy Jointgrass**	**V,P**	**V**	**3**	
Plantae	Flora	Proteaceae	5354	*Floydia praealta*		Ball Nut	V,P	V	4	
Plantae	**Flora**	**Proteaceae**	**5432**	***Helicia cochlearis pinnatifolia***		**Red Boppel Nut**	**V,P**	**V**	**3**	
Plantae	Flora	Proteaceae	5446	*Macadamia tetraphylla*		Rough-shelled Bush Nut	V,P	V	12	
Plantae	**Flora**	**Sapindaceae**	**5889**	***^Diploglottis campbellii***		**Small-leaved Tamarind**	**E1,P,2**	**E**	**3**	
Plantae	Flora	Sapotaceae	11957	*Niemeyera whitei*		Rusty Plum, Plum Boxwood	V,P		1	

Annexure 3 Extract from Population and Housing Forecast Report 2011 – 2036

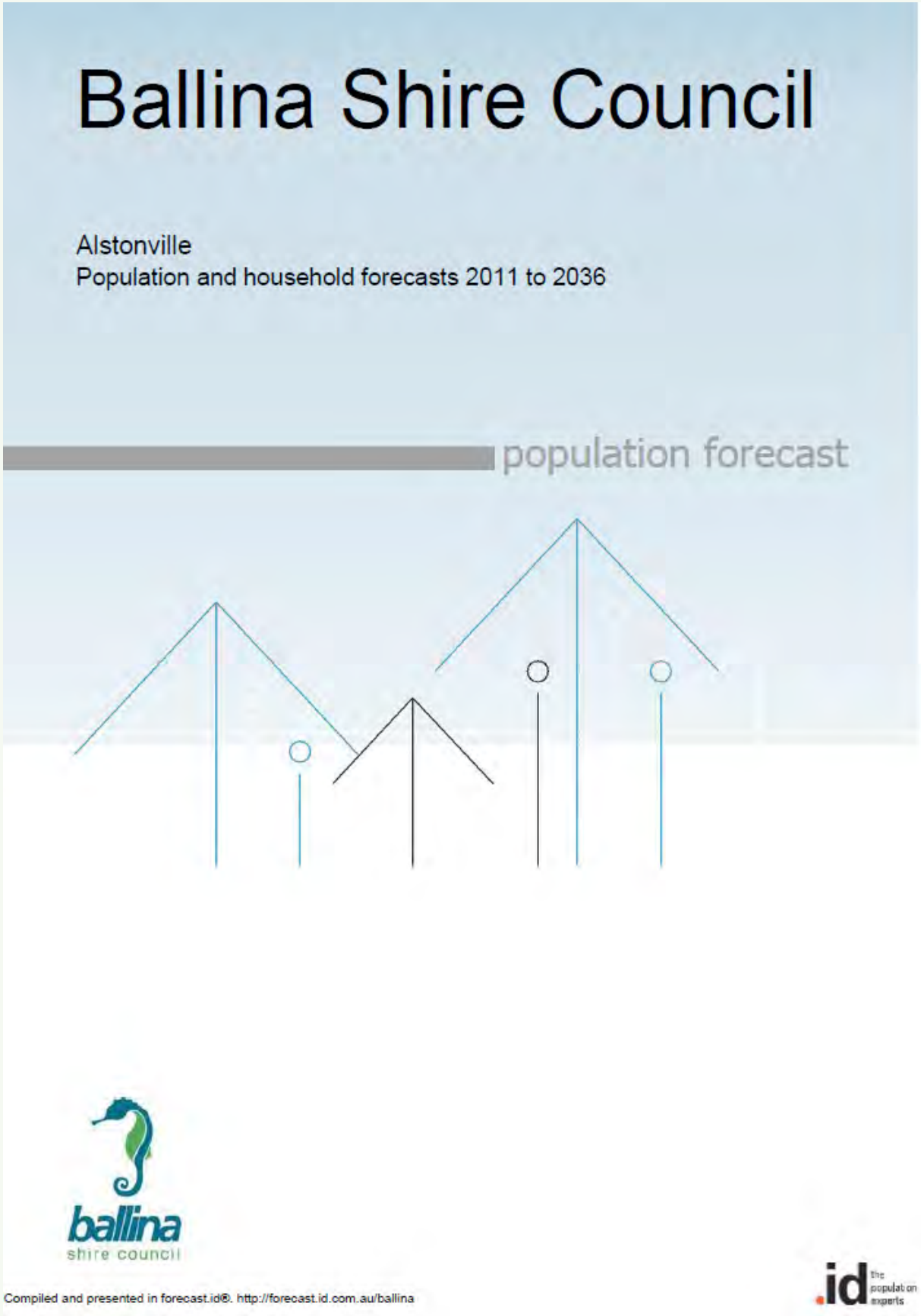


Table of contents

Welcome to Ballina Shire population forecasts

The Ballina Shire population and household forecasts present what is driving population change in the community and how the population, age structure and household types will change each year between 2011 and 2036.

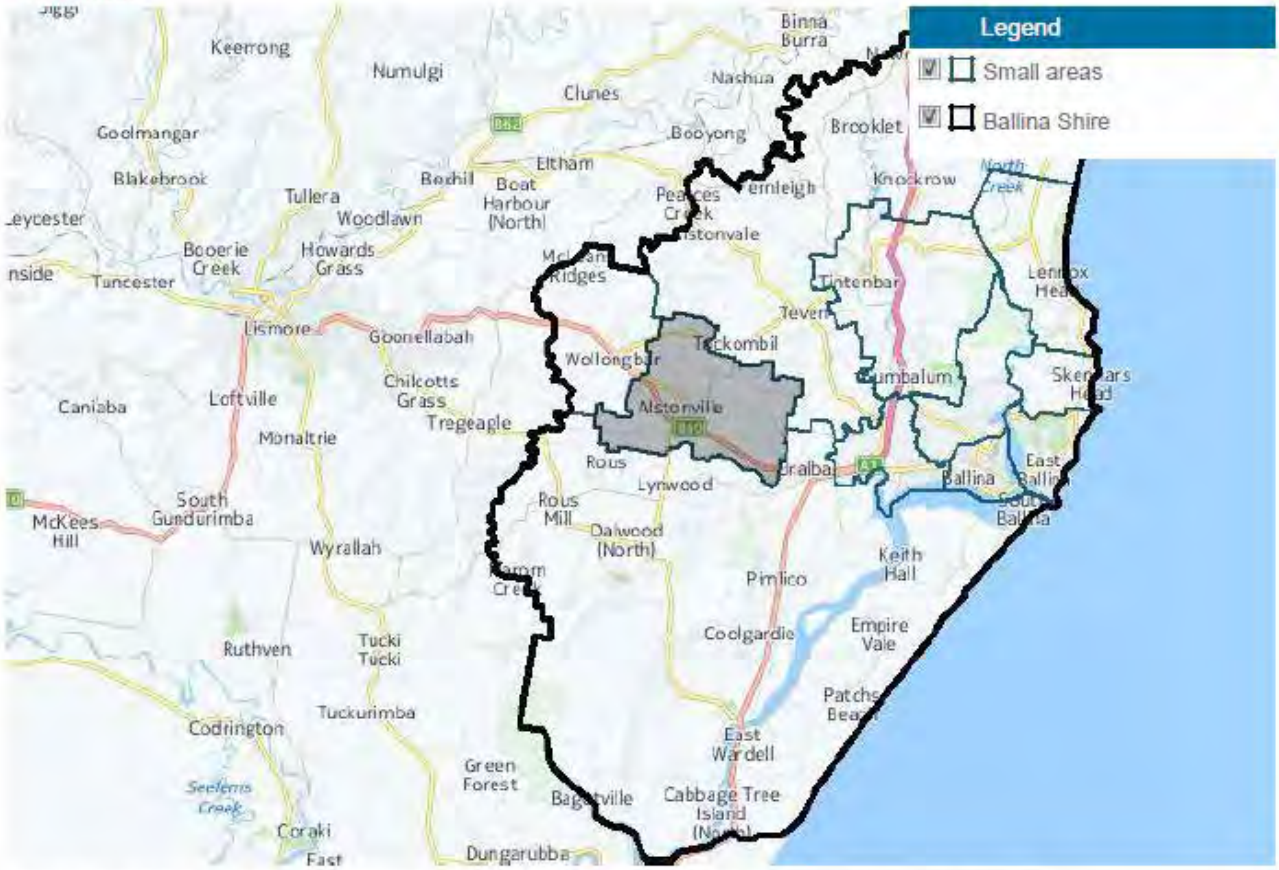
The forecasts are designed to provide community groups, Council, investors, business, students and the general public with knowledge to make confident decisions about the future.

These forecasts were last updated in February 2016 by .id, the population experts, on behalf of Ballina Shire. Forecasts are available for each year from 2011 to 2036.

Important	Population 2016	Population 2036	Change 2016-36
Statistics	42,506 forecast.id	51,307 forecast.id	20.71% forecast.id

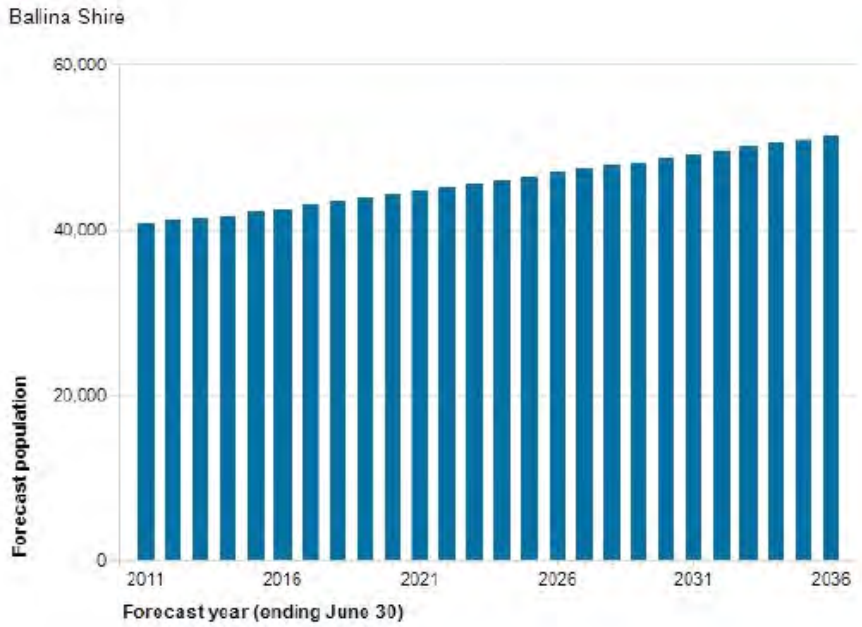
Forecast areas

Ballina Shire



Source: Population and household forecasts, 2011 to 2036, prepared by .id, the population experts, February 2016.

Forecast population



Population and household forecasts, 2011 to 2036, prepared by .id, February 2016.

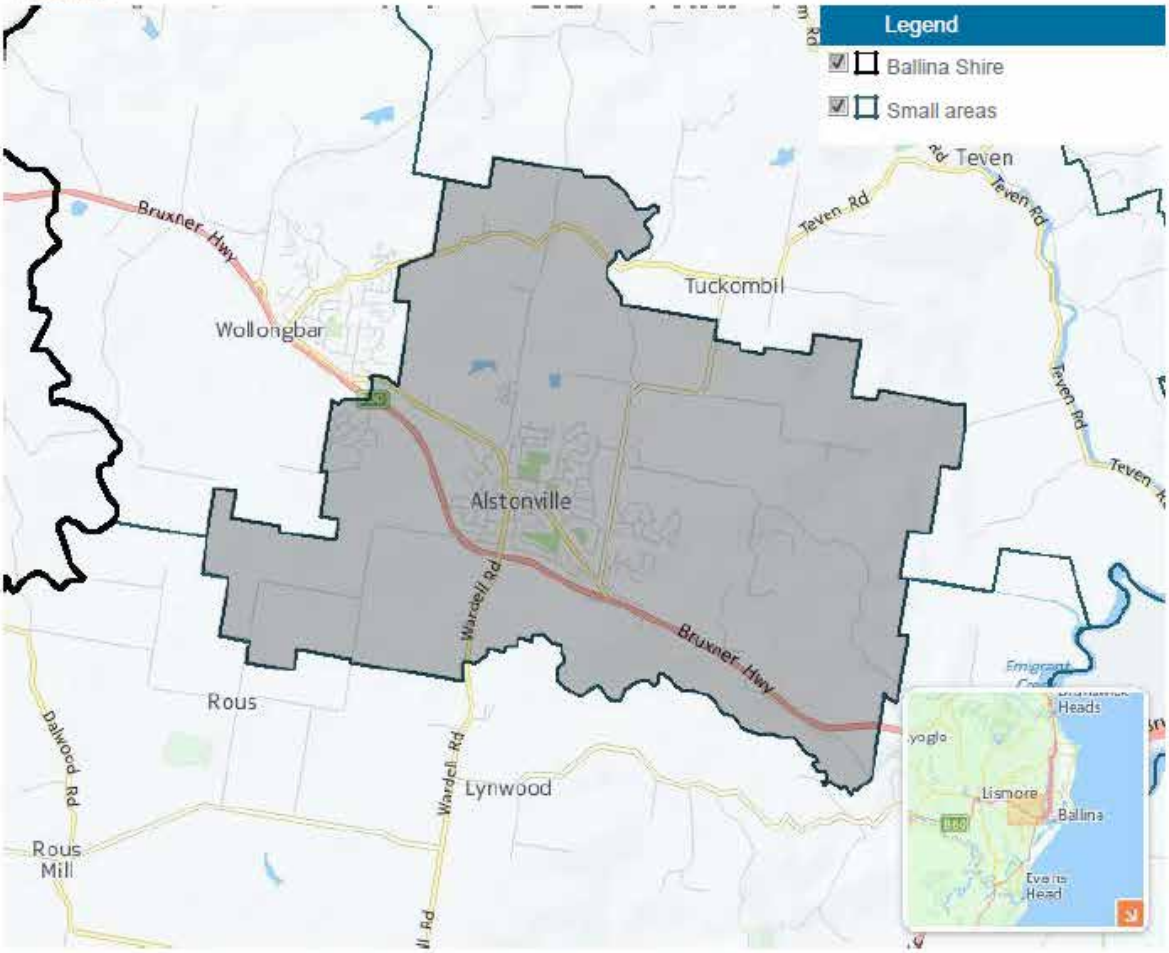
About the forecast areas

Alstonville is bounded by the locality of Alstonvale, Maguires Creek and Tuckombil in the north, the localities of Teven and Uralba in the east, Duck Creek and the localities of Lynwood and Rous in the south, and the locality of Wollongbar in the west.

Important Statistics	Population 2016	Population 2036	Change 2016-36
	5,844	6,168	5.54%

Forecast areas

Alstonville



Source: Population and household forecasts, 2011 to 2036, prepared by .id, the population experts, February 2016.

Drivers of population change

Development history

Ballina Shire is located on the Far North Coast of New South Wales, about 770 kilometres north of Sydney and 190 kilometres south of Brisbane. Ballina Shire is bounded by Byron Shire in the north, the Coral Sea in the east, the Richmond Valley Council area in the south, and the City of Lismore in the west.

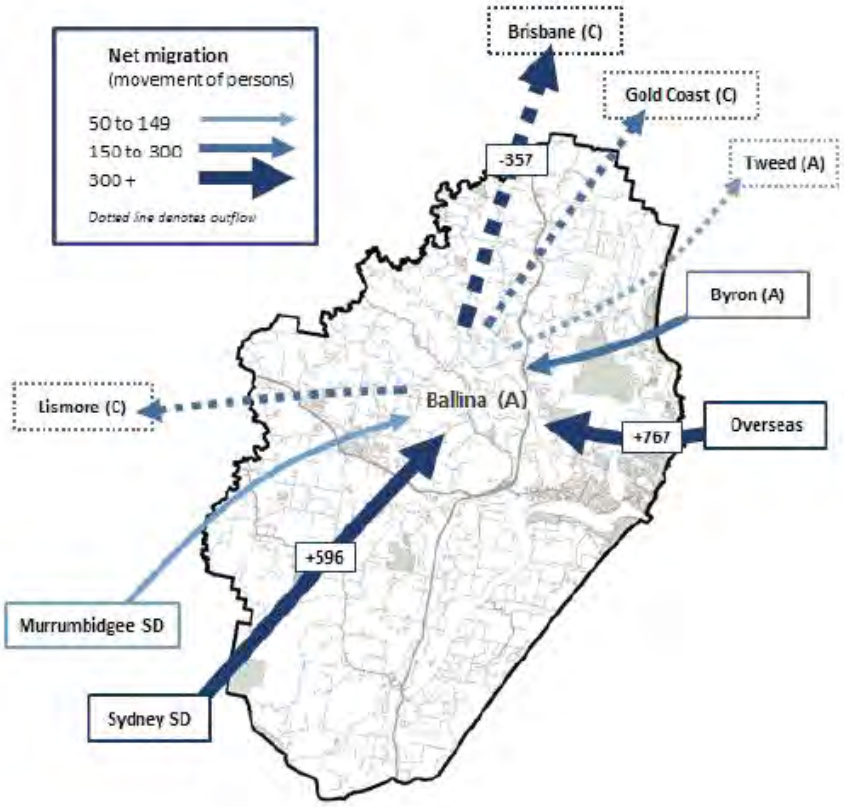
European settlement dates from 1842, with land used mainly for timber-getting and agriculture. From the 1860s, land was used more for growing sugar cane, maize and for dairy farming.

Ballina Shire is served by the Pacific Highway, the Bruxner Highway, and Ballina Byron Gateway Airport. Major features of the Shire include North Coast TAFE (Ballina and Wollongbar Campuses), the Ballina CBD, Ballina Fair Shopping Centre, Ballina District Hospital, Ballina Racecourse, Ballina Naval & Maritime Museum, Crawford House Museum, The Macadamia Castle, Thursday Plantation, the Richmond River and various beaches and nature reserves. Ballina Shire contains a diversity of housing, ranging from homesteads in rural areas to post-war residential in areas such Ballina Island, Ballina East, Alstonville and Wollongbar.

Migration patterns

From the 1860s, land was used more for sugar cane growing, maize growing and dairy farming. Gradual growth took place during the late 1800s. Significant development occurred from the post-war years, with the population increasing from about 8,000 in 1947 to about 9,000 in 1966. Rapid growth took place during the 1970s and 1980s. The population increased from under 11,000 in 1971 to 19,000 in 1981, and then to 30,000 in 1991. The population continued to increase from the 1990s, rising to over 39,000 in 2011, with growth slowing between 2006 and 2011.

Historical migration flows, Ballina Shire, 2006-2011



'Overseas' refers to arrivals only.

Population and household forecasts, 2011 to 2036, prepared by .id the population experts, February 2016.

Note: The migration flows depicted above are historical and do not represent future or forecast migration flows or subsequent council boundary changes. The arrows represent migration flows to the area as a whole and do not indicate an origin or destination for any specific localities within the area. Overseas flow shows overseas arrivals only, based on answers to the census question "where did the person usually live 5-years ago.

Housing supply

Opportunities for new dwellings are likely to be greatest in a number of strategic greenfield growth areas including Ballina North, Cumbalum, Lennox Head, Skennars Head and Wollongbar. Ballina Island is expected to experience some new infill/minor site dwellings.

Other resources

Population summary

This table summarises the population for Ballina Shire and each of its small areas. This enables you to see how population change is affecting different parts of the LGA in different ways. Some small areas may be rapidly growing whilst others are stable or even declining in population.

Continue to the forecast results section to see detailed forecasts of population, households, and dwellings for each of the small areas.

Please note that population numbers in forecast.id for the 2011 base year are derived from Estimated Resident Population from the Australian Bureau of Statistics. These differ from (and are usually higher than) Census counts as they factor in population missed by the Census and population overseas on Census night. They are generally considered a more accurate measure of population size than Census counts.

Population summary

Ballina Shire

	Forecast year						Change between 2011 and 2036	
Area	2011	2016	2021	2026	2031	2036	Total change	Avg. annual % change
Ballina Shire	40,754	42,506	44,615	46,814	48,997	51,307	+10,553	+0.93
Alstonville	5,810	5,844	5,943	6,041	6,120	6,168	+359	+0.24
Ballina (Island)	7,147	7,136	7,314	7,376	7,432	7,499	+352	+0.19
Ballina (North)	1,157	1,580	2,071	2,434	2,501	2,500	+1,343	+3.13
Cumbalum - Tintenbar	1,907	2,336	2,721	3,155	3,654	4,234	+2,328	+3.24
East Ballina	5,576	5,741	5,745	5,598	5,503	5,498	-78	-0.06
Lennox Head	6,324	6,721	6,971	7,375	8,027	8,762	+2,438	+1.31
Skennars Head	1,254	1,214	1,264	1,641	2,023	2,373	+1,118	+2.58
Teven - Newrybar - Rural North	2,379	2,365	2,379	2,417	2,466	2,525	+146	+0.24
Wardell - Rural South	3,691	3,676	3,649	3,640	3,676	3,716	+25	+0.03
West Ballina	2,992	3,078	3,171	3,260	3,274	3,273	+281	+0.36
Wollongbar - McLeans Ridges	2,517	2,815	3,387	3,877	4,321	4,759	+2,242	+2.58

Population and household forecasts, 2011 to 2036, prepared by .id , the population experts, February 2016.

Population, households and dwellings

This summary shows the results of the forecasts for population, households and dwellings in Ballina Shire. The period 2011 to 2021, as the short to medium term, is likely to be the most accurate and useful forecast information for immediate planning purposes.

It is important to look at the relationship between population and average household size. If the average household size is falling, then there will need to be growth in the number of households (and dwellings for them to live in) to maintain or grow the population.

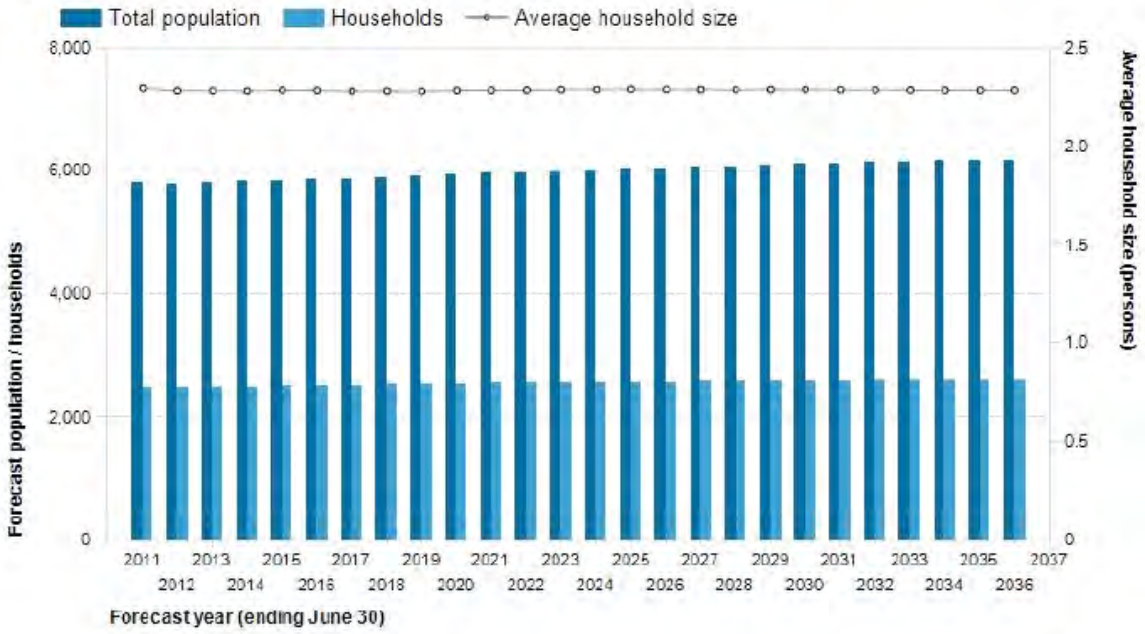
Forecast population, households and dwellings

Alstonville	Forecast year					
Summary	2011	2016	2021	2026	2031	2036
Population	5,810	5,844	5,943	6,041	6,120	6,168
Change in population (5yrs)	–	35	99	98	79	48
Average annual change	–	0.12%	0.34%	0.33%	0.26%	0.16%
Households	2,461	2,488	2,531	2,554	2,579	2,604
Average household size	2.29	2.28	2.28	2.29	2.29	2.28
Population in non private dwellings	164	164	164	194	224	224
Dwellings	2,550	2,578	2,622	2,647	2,672	2,697
Dwelling occupancy rate	96.51	96.51	96.53	96.49	96.52	96.55

Population and household forecasts, 2011 to 2036, prepared by .id, the population experts, February 2016.

Forecast population, households and average household size

Alstonville



Population and household forecasts, 2011 to 2036, prepared by .id the population experts, February 2016.

Key findings

In 2011, the total population of Alstonville was estimated to be 5,810 people. It is expected to increase by over 230 people to 6,041 by 2021, at an average annual growth rate of 0.39%. This is based on an increase of over 90 households during the period, with the average number of persons per household remaining stable from 2.29 to 2.29 by 2021.

Components of population change

There are two ways in which populations can change, through net migration and/or through natural increase (births minus deaths). Some areas are more driven by one or other of these factors. Migration is largely driven by housing development, whereas natural increase is a function of the age of the population.

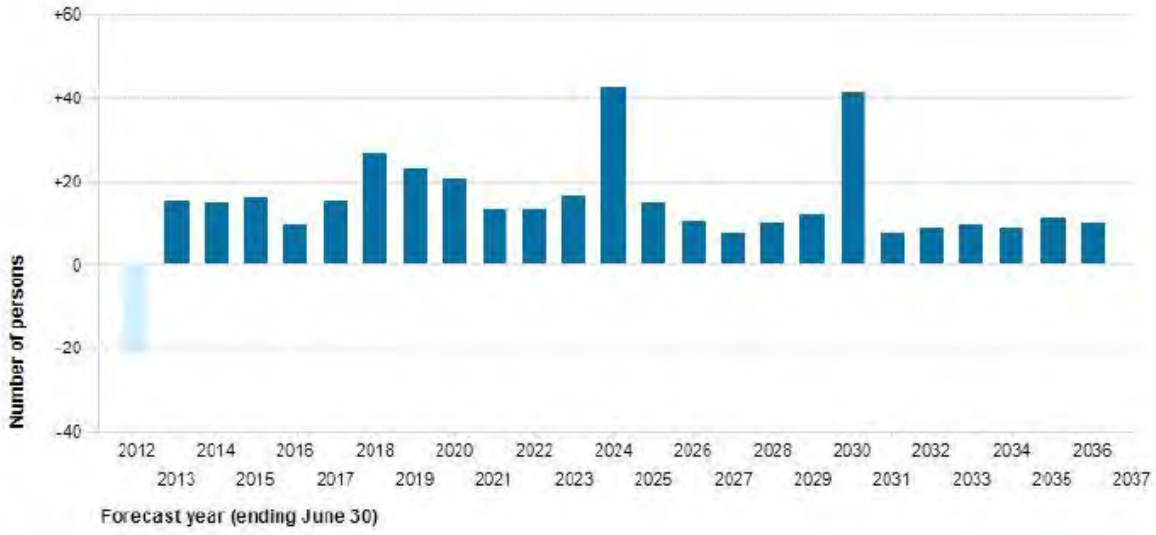
Components of population change

Alstonville	Forecast period				
Component	2012 to 2016	2017 to 2021	2022 to 2026	2027 to 2031	2032 to 2036
Births	311	327	322	315	316
Deaths	390	402	390	393	408
Natural increase/decrease	-78	-75	-68	-79	-92
Net migration	113	174	136	128	140
Change in persons in non-private dwellings	0	0	30	30	0
Total population change	35	99	98	79	48

Population and household forecasts, 2011 to 2036, prepared by .id , the population experts, February 2016.

Forecast population change

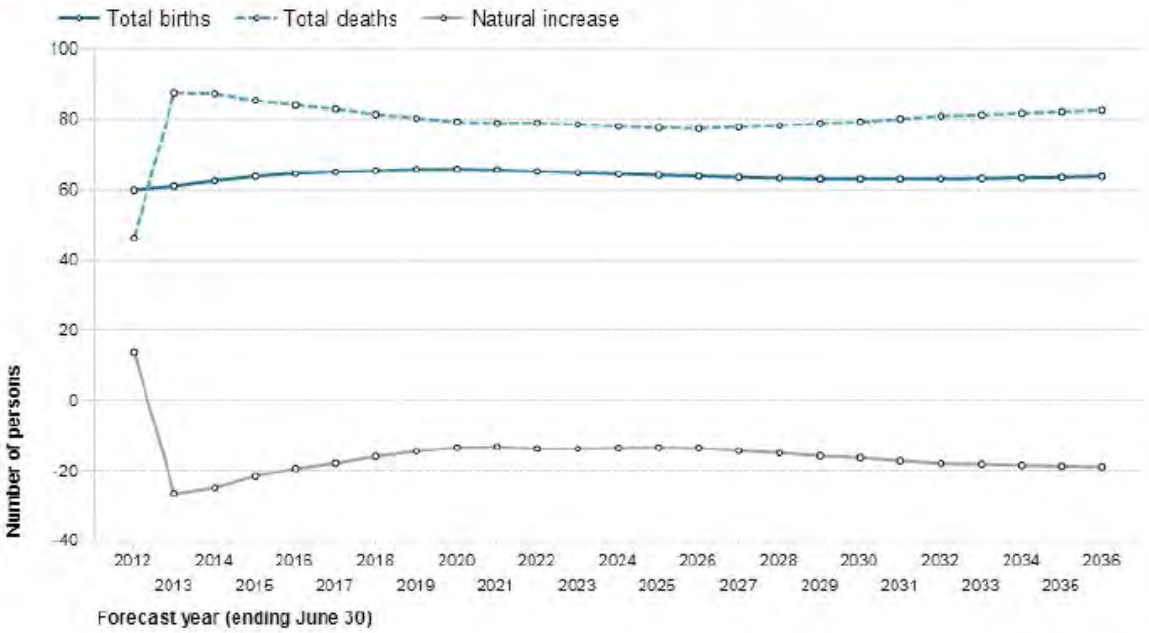
Alstonville



Population and household forecasts, 2011 to 2036, prepared by .id the population experts, February 2016.

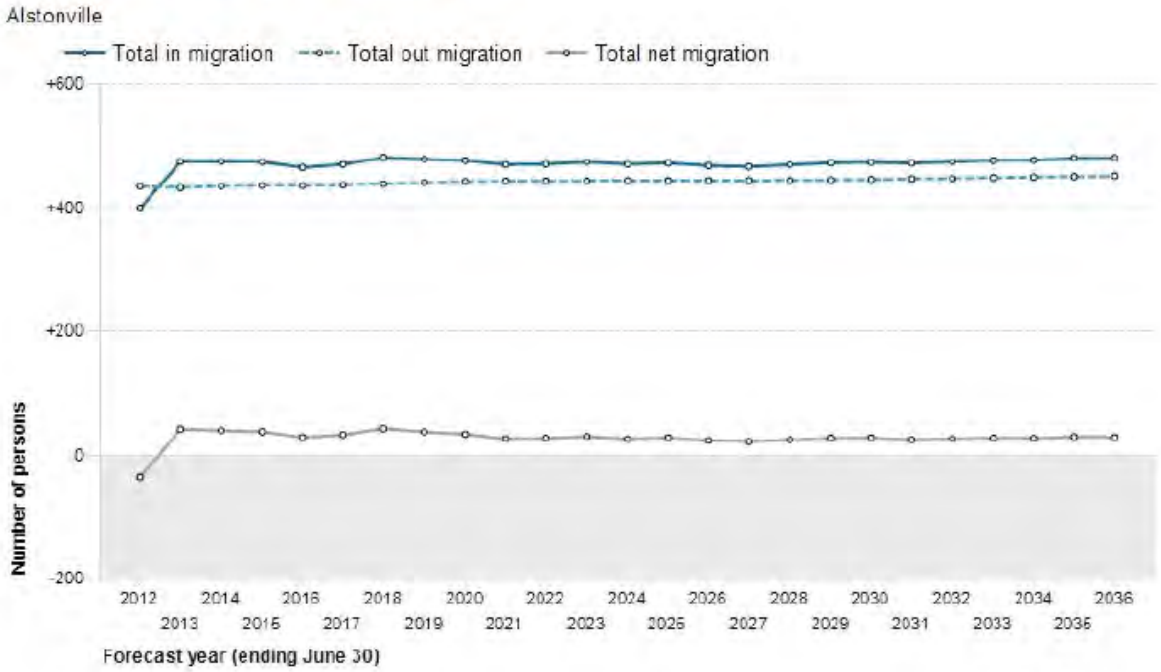
Forecast births, deaths and natural increase/decrease

Alstonville



Population and household forecasts, 2011 to 2036, prepared by .id the population experts, February 2016.

Forecast in, out and net migration



Population and household forecasts, 2011 to 2036, prepared by .id the population experts, February 2016.

Population and age structure

Knowledge of how the age structure of the population is changing is essential for planning age-based facilities and services, such as child care, recreation and aged care.

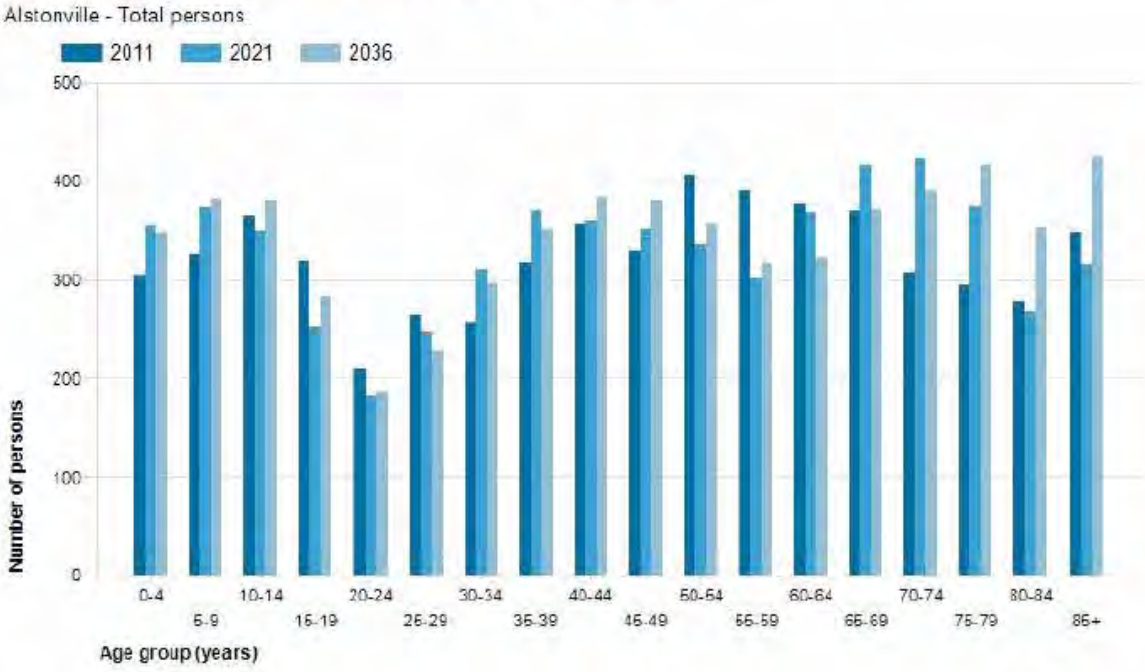
The forecast age groups of Ballina Shire is a function of the current age of the population (people aging each year, being born and dying) as well as the age of people migrating into and out of the area. This in turn is driven by location (fringe, city centre, regional or rural) the existing housing stock (separate dwellings, medium or high density), the amount and type of new residential development (same as existing stock, or diversifying) and where the area is in a cycle of change. We call this the area's residential role and function. You can learn more about this in the section household and suburb life cycles.

Forecast age structure - 5 year age groups

Alstonville - Total persons	2011		2021		2036		Change between 2011 and 2036
Age group (years)	Number	%	Number	%	Number	%	Number
0 to 4	304	5.2	355	6.0	347	5.6	+43
5 to 9	324	5.6	373	6.3	382	6.2	+58
10 to 14	364	6.3	348	5.9	381	6.2	+17
15 to 19	319	5.5	251	4.2	283	4.6	-35
20 to 24	208	3.6	181	3.0	186	3.0	-22
25 to 29	265	4.6	247	4.2	228	3.7	-37
30 to 34	257	4.4	311	5.2	296	4.8	+39
35 to 39	316	5.4	369	6.2	352	5.7	+36
40 to 44	357	6.1	359	6.0	384	6.2	+27
45 to 49	329	5.7	351	5.9	380	6.2	+51
50 to 54	406	7.0	336	5.7	356	5.8	-49
55 to 59	390	6.7	301	5.1	317	5.1	-72
60 to 64	377	6.5	367	6.2	321	5.2	-56
65 to 69	369	6.3	415	7.0	370	6.0	+2
70 to 74	307	5.3	424	7.1	390	6.3	+83
75 to 79	294	5.1	374	6.3	415	6.7	+121
80 to 84	277	4.8	267	4.5	353	5.7	+76
85 and over	347	6.0	315	5.3	425	6.9	+78
Total persons	5,810	100.0	5,943	100.0	6,168	100.0	+359

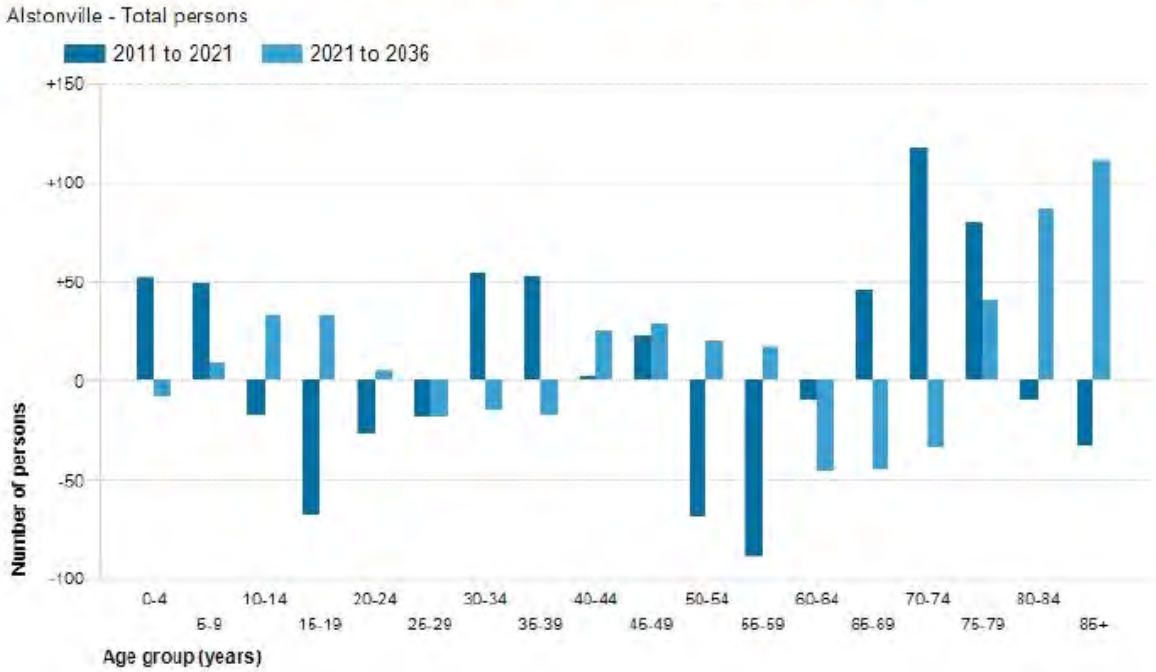
Population and household forecasts, 2011 to 2036, prepared by .id , the population experts, February 2016.

Forecast age structure - 5 year age groups



Population and household forecasts, 2011 to 2036, prepared by .id the population experts, February 2016.

Forecast change in age structure - 5 year age groups



Population and household forecasts, 2011 to 2036, prepared by .id the population experts, February 2016.

Key findings

In 2011, the dominant age structure for persons in Alstonville was ages 50 to 54 , which accounted for 7.0% of the total persons.

The largest increase in persons between 2011 and 2021 is forecast to be in ages 70 to 74 , which is expected to increase by 117 and account for 7.1% of the total persons.

The largest 5 year age group in 2021 is 70 to 74 years, with a total of 424 persons.

Household types

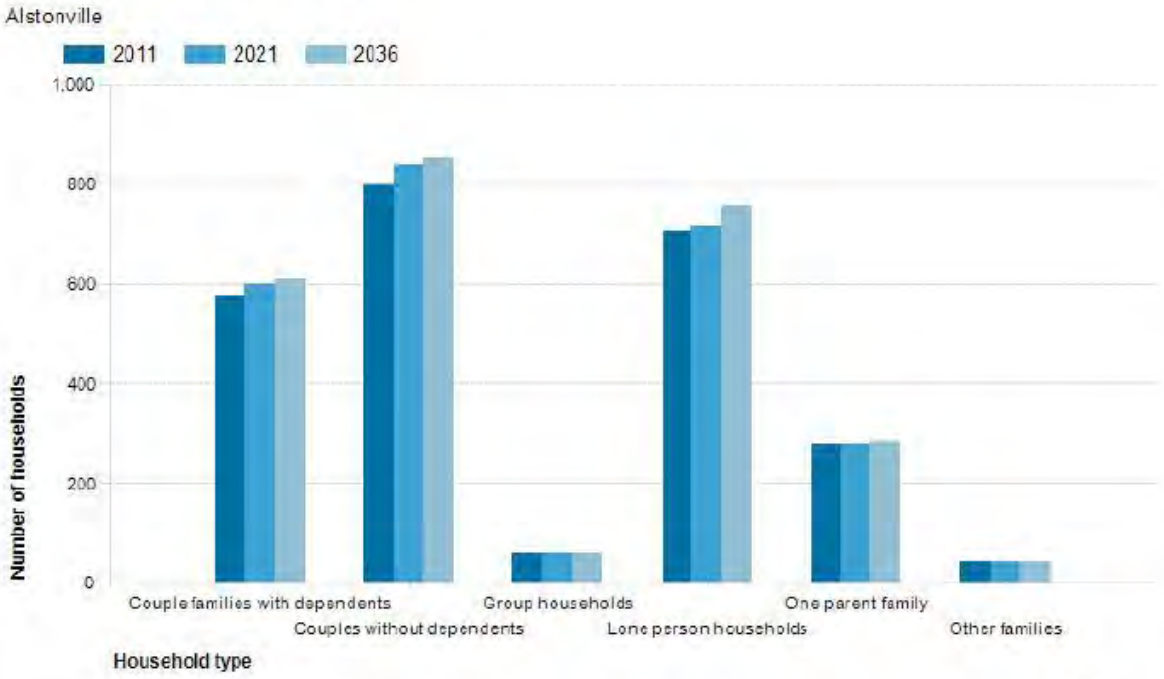
Analysing the future household structure in Ballina Shire, especially in conjunction with age structure, provides insight to the role the area plays in the housing market. Some areas, usually with separate housing stock, are dominated by families. Others, with more dense housing in inner city locations have significant numbers of lone person households and couples without dependents.

Forecast household types

Alstonville	2011		2021		2036		Change between 2011 and 2036
Type	Number	%	Number	%	Number	%	Number
Couple families with dependents	576	23.4	598	23.6	608	23.3	+32
Couples without dependents	798	32.4	837	33.1	854	32.8	+56
Group households	60	2.4	61	2.4	60	2.3	0
Lone person households	707	28.7	716	28.3	757	29.1	+50
One parent family	277	11.3	277	10.9	283	10.9	+6
Other families	43	1.7	42	1.7	42	1.6	-1

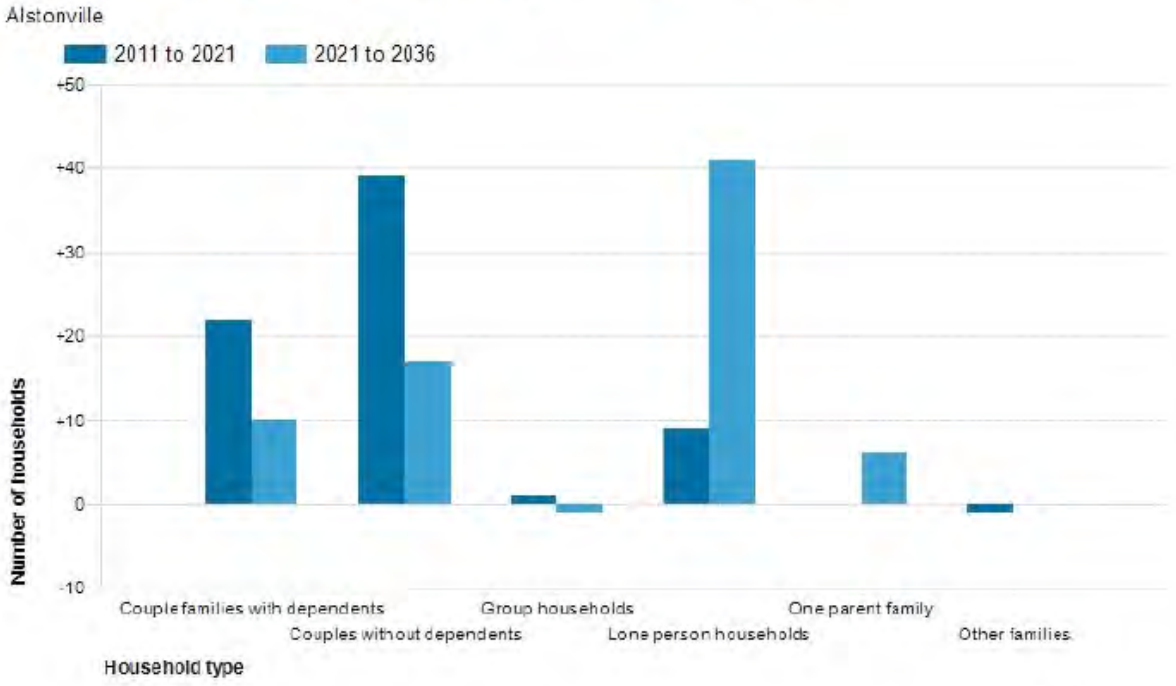
Population and household forecasts, 2011 to 2036, prepared by .id , the population experts, February 2016.

Forecast household types



Population and household forecasts, 2011 to 2036, prepared by .id the population experts, February 2016.

Forecast change in household types, 2011 to 2036



Population and household forecasts, 2011 to 2036, prepared by .id the population experts, February 2016.

Key findings

In 2011, the dominant household type in Alstonville was Couples without dependents, which accounted for 32.4% of all households.

The largest increase between 2011 and 2021 is forecast to be in Couples without dependents, which will increase by 39 households and account for 33.1% of all households.

In contrast Other families is forecast to decrease by 1 households, to comprise 1.7% of all households in 2021, compared to 1.7% in 2011.

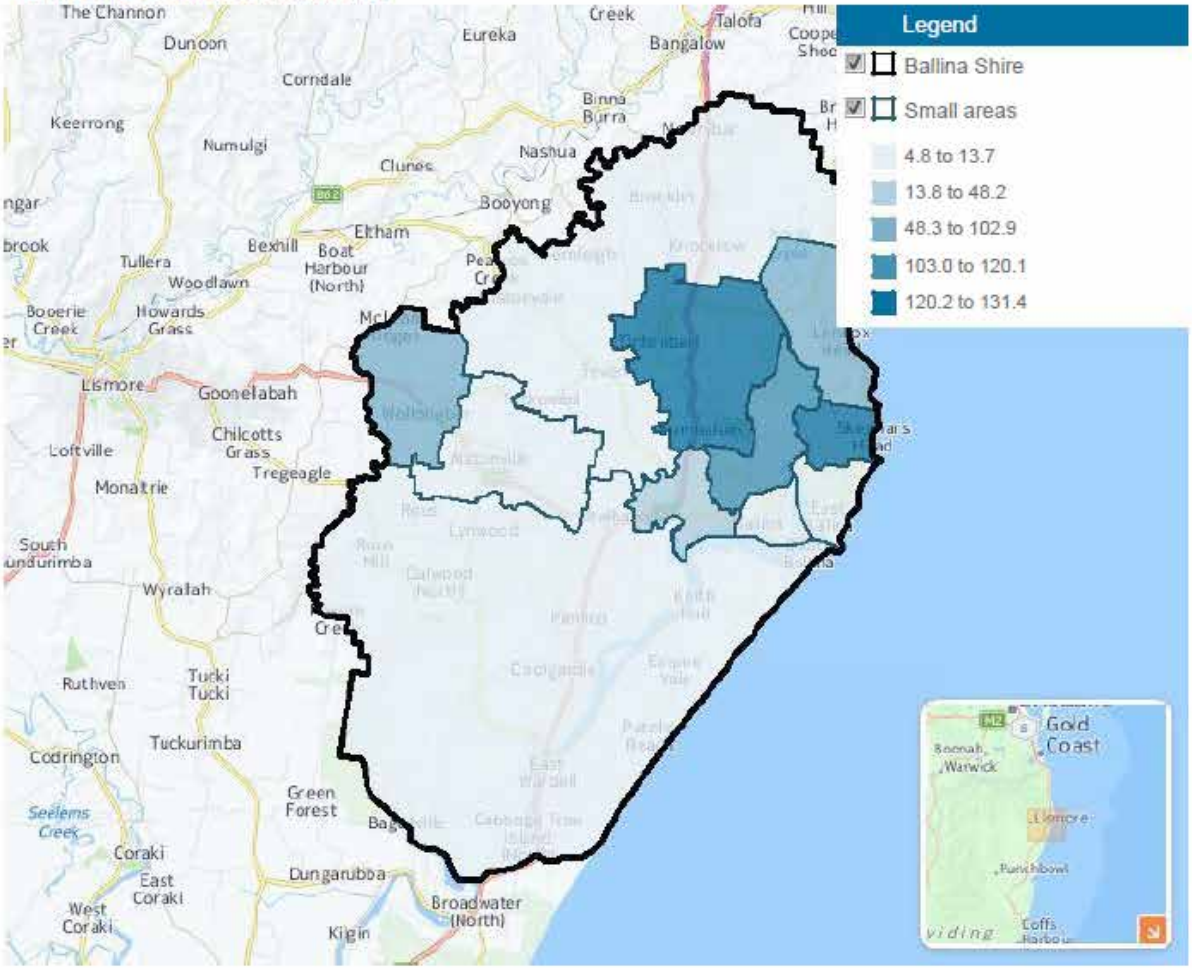
Dwellings and development map

Visualising the geographic pattern of growth in dwelling stock across Ballina Shire is a good starting point for assessing the scale and type of change each part of the area is undergoing. Some areas will be experiencing significant growth in new dwellings, either through greenfield development or densification and renewal.

However it would be a mistake to assume that areas not experiencing significant housing development are not undergoing change. Other processes will be at work such as the aging-in-place of the existing population and changing household structures. The age structure and household type maps will uncover these population shifts.

Forecast dwellings and development map

Ballina Shire, 2011 to 2036 percent change



Source: Population and household forecasts, 2011 to 2036, prepared by .id, the population experts, February 2016.

Forecast dwellings and development

Ballina Shire	2011		2036		Change between 2011 and 2036	
Area	Number	%	Number	%	Number	%
Ballina Shire	18,182	100.0	23,452	100.0	+5,270	+29.0
Alstonville	2,550	14.0	2,697	11.5	+147	+5.8
Ballina (Island)	3,701	20.4	4,027	17.2	+326	+8.8
Ballina (North)	529	2.9	1,074	4.6	+545	+103.0
Cumbalum - Tintenbar	664	3.7	1,531	6.5	+867	+130.5
East Ballina	2,696	14.8	2,825	12.0	+129	+4.8
Lennox Head	2,721	15.0	4,035	17.2	+1,314	+48.3
Skennars Head	504	2.8	1,110	4.7	+606	+120.2
Teven - Newrybar - Rural North	956	5.3	1,058	4.5	+102	+10.7
Wardell - Rural South	1,501	8.3	1,603	6.8	+102	+6.8
West Ballina	1,385	7.6	1,576	6.7	+191	+13.8
Wollongbar - McLeans Ridges	975	5.4	1,916	8.2	+941	+96.5

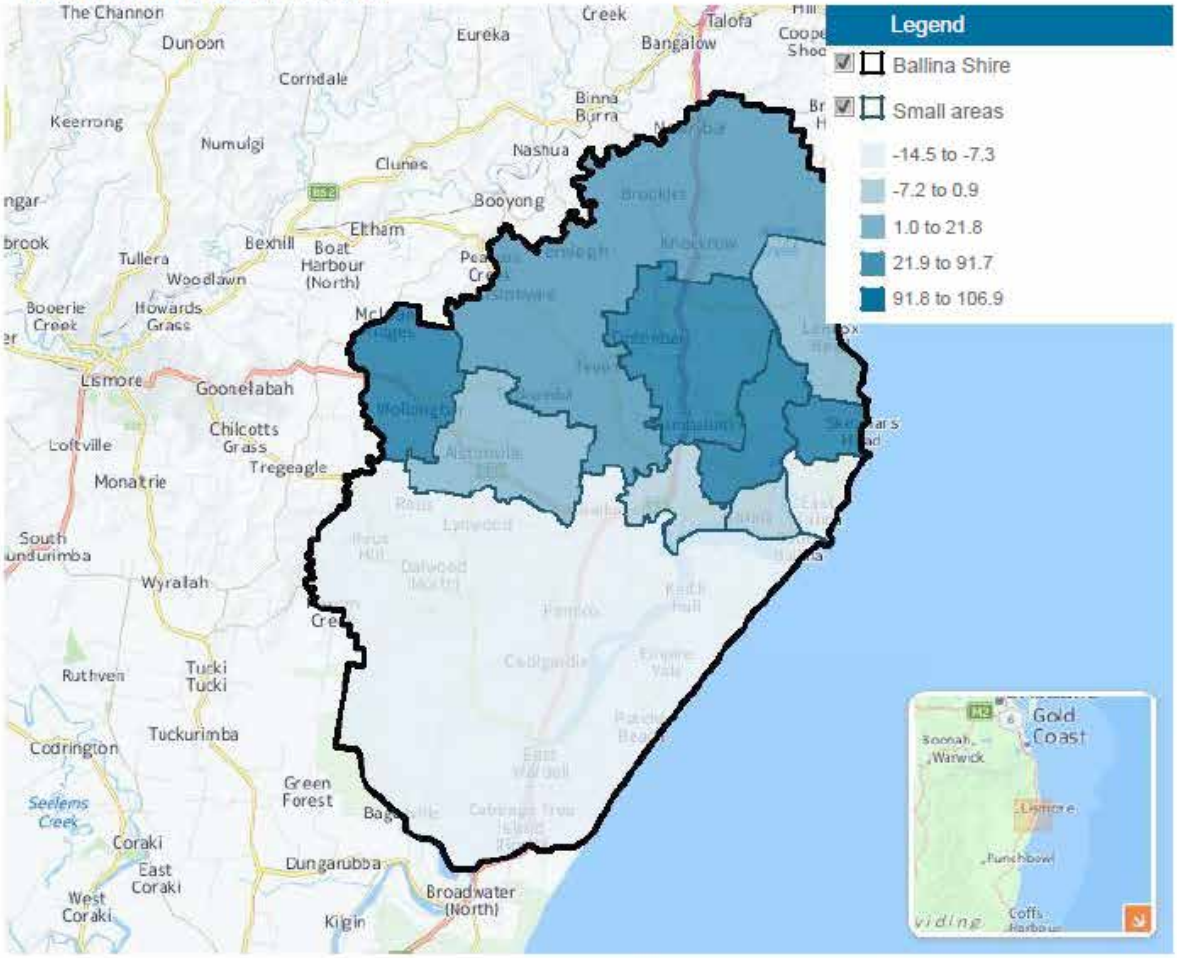
Population and household forecasts, 2011 to 2036, prepared by .id the population experts, February 2016.

Population and age structure map

Knowing when and where to deliver age-based services is an essential part of local government planning. Mapping the distribution of selected age groups across Ballina Shire provides the evidence-base for efficiently targeting and delivering these services. You can learn more about how places move through cycles of change which affect their age by visiting population and age structure.

Population and age structure map - persons aged 0 to 4 years

Ballina Shire, 2011 to 2036 percent change



Source: Population and household forecasts, 2011 to 2036, prepared by .id, the population experts, February 2016.

Population and age structure - persons aged 0 to 4 years

Ballina Shire	2011		2036		Change between 2011 and 2036	
Area	Number	%	Number	%	Number	%
Ballina Shire	2,202	5.4	2,668	5.2	+466	+21.2
Alstonville	304	5.2	347	5.6	+43	+14.2
Ballina (Island)	323	4.5	300	4.0	-23	-7.2
Ballina (North)	60	5.2	122	4.9	+62	+103.3
Cumbalum - Tintenbar	129	6.8	266	6.3	+137	+106.0
East Ballina	276	4.9	236	4.3	-40	-14.5
Lennox Head	411	6.5	491	5.6	+80	+19.4
Skennars Head	60	4.7	119	5.0	+60	+99.8
Teven - Newrybar - Rural North	114	4.8	139	5.5	+25	+21.9
Wardell - Rural South	201	5.5	185	5.0	-17	-8.4
West Ballina	167	5.6	163	5.0	-4	-2.6
Wollongbar - McLeans Ridges	157	6.2	301	6.3	+144	+91.8

Population and household forecasts, 2011 to 2036, prepared by .id , the population experts, February 2016.

Residential development

The addition of dwellings to the housing stock is a major driver of population growth in an area, providing opportunities for households to relocate from other areas or new households to form locally (such as young people leaving the family home or separations/divorces).

Residential development can take various forms depending on the availability of land. These include new housing estates on greenfield sites, subdivision in existing residential neighbourhoods (often called infill development), conversion of industrial lands to residential lands, and densification of housing by building up.

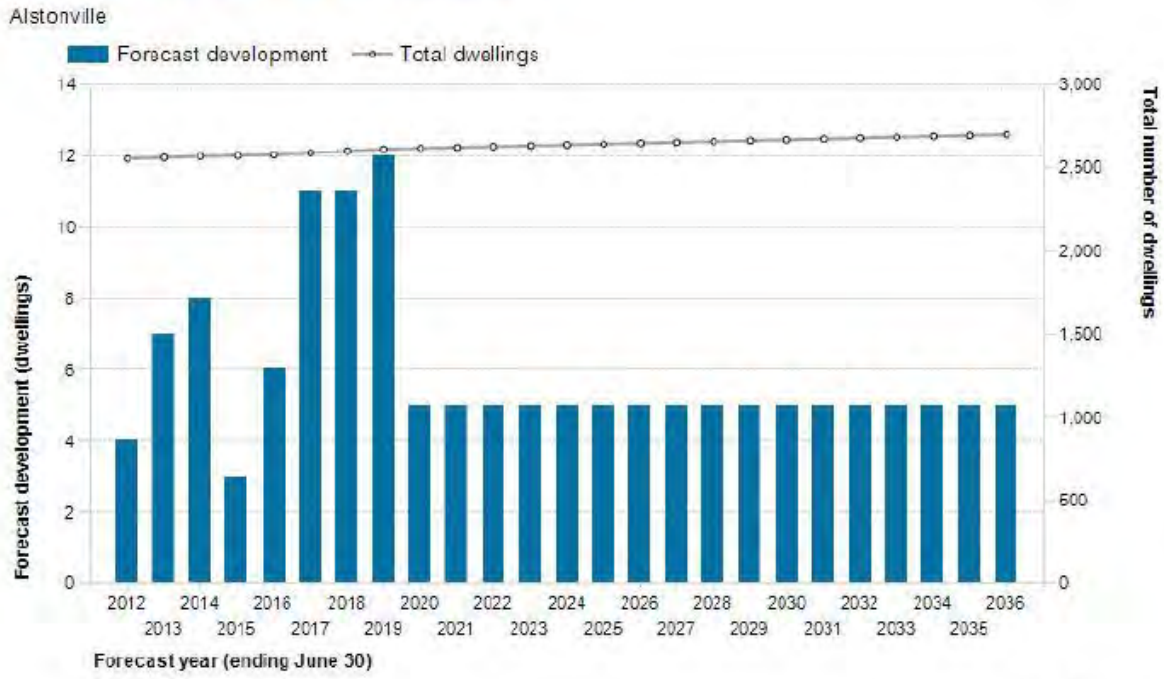
.id's forecasters worked with Council planners to understand the likely development activity in each small area. This forms the development assumptions for the forecasts. This table shows the quantity of new development assumed in each small area in Ballina Shire. Select each small area to see detailed assumptions.

List of forecast land developments and infill assumptions:

2011-2015 dwelling additions are based on an assessment of major site activity and building approvals, lagged by 12-18 months. Assumptions concerning development over the forecast period include:

- 209 Ballina Road Dwellings - 19 dwellings (2017-2019)
- Low level of Infill/Minor Sites development (3-8 dwellings per annum)

Forecast residential development



Population and household forecasts, 2011 to 2036, prepared by .id the population experts, February 2016.

Net migration by age

Migration is one of the most important components of population change. Once you have established the amount of development activity in an area, the next step is to make assumptions about who will move into the area as well as who is leaving the area.

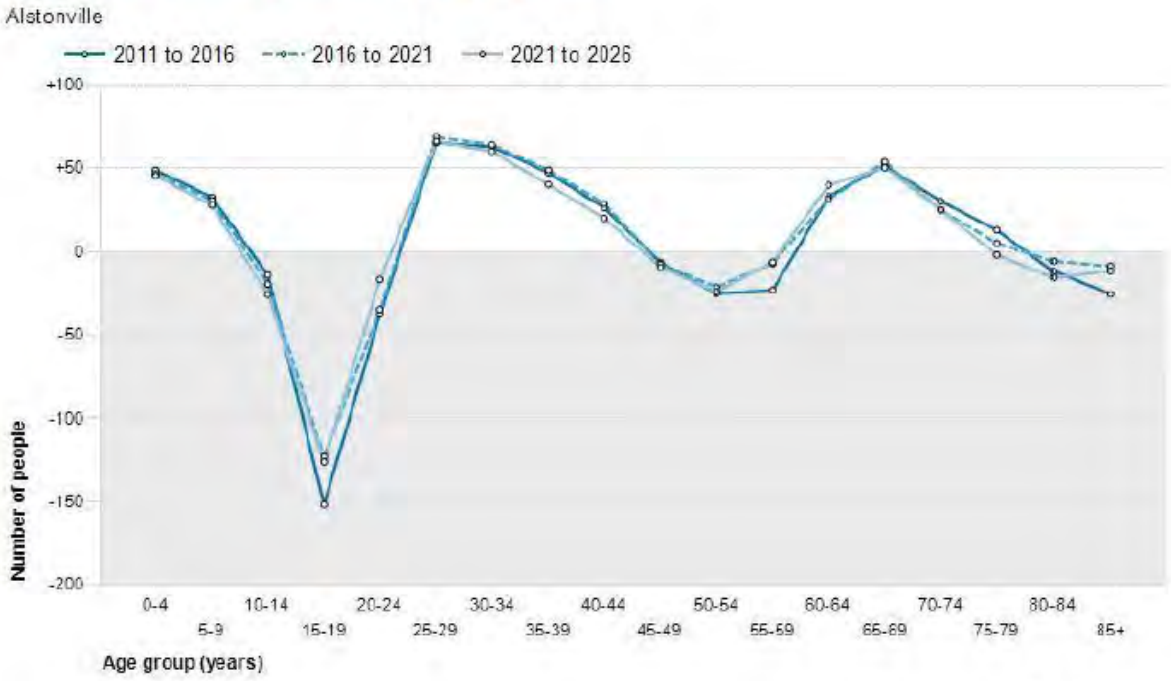
Net migration by age is an excellent way of understanding housing markets. The most mobile age groups in the population are young adults. They tend to move to attend educational institutions, seek work and express a change in lifestyle. Market research has shown that empty nesters are more likely to move to smaller accommodation when appropriate and affordable alternative housing is supplied in the local area that is accessible to established social networks.

Select each small area to see how migration patterns differ for each area across Ballina Shire depending on their housing markets and stage in the suburb life cycle.

Migration assumptions influenced by:

- Very stable migration profile expected across the 2011-2026 period
- Gain of young and mature family households (0-9 and 25-44 year olds)
- Loss of young adults and couples (18-24 years) as home leavers move out of the area
- Loss of 'empty-nester' age groups (50-59 years)
- Gain of retiree age groups (60-79 years)

Forecast net migration by age group



Population and household forecasts, 2011 to 2036, prepared by .id the population experts, February 2016.

Non-private dwellings

Residential non-private dwellings include aged care facilities as well as defence force facilities, hospitals, prisons, staff quarters and boarding houses. As a general rule, an increase in people aged 18 to 24 living in non-private dwellings indicates a growth in student accommodation, defence force facilities or prisons. Similarly an increase in people aged over 75 living in non-private dwellings indicates growth in aged care facilities.

Persons in non-private dwellings

Ballina Shire

	Year		Change between 2011 and 2036		
Area	2011	2036	Total change	Aged 18 to 24 years	Aged 75+ years
Ballina Shire	644	977	+333	0	+333
Alstonville	164	224	+60	0	+60
Ballina (Island)	461	551	+90	0	+90
Ballina (North)	9	192	+183	0	+183
Cumbalum - Tintenbar	0	0	0	0	0
East Ballina	2	2	0	0	0
Lennox Head	4	4	0	0	0
Skennars Head	0	0	0	0	0
Teven - Newrybar - Rural North	0	0	0	0	0
Wardell - Rural South	3	3	0	0	0
West Ballina	2	2	0	0	0
Wollongbar - McLeans Ridges	0	0	0	0	0

Population and household forecasts, 2011 to 2036, prepared by .id , the population experts, February 2016.

Key findings

There were 644 people estimated to be living in non-private dwellings in Ballina Shire in 2011. The number of persons in non-private dwellings in Ballina Shire is expected to increase to 767 persons in 2021 and with a gain 977 persons in 2036.

Between 2011 and 2021, Ballina (North) is forecast to experience the greatest change, with a gain of 183 persons in non-private dwellings. This is due to an increase of persons in non-private dwellings aged 75 years and over, which is predominantly aged care.

Births and deaths

The number of births in Ballina Shire are derived by multiplying age specific fertility rates of women aged 15-49 by the female population in these age groups for all years during the forecast period.

Birth rates are especially influential in determining the number of children in an area, with most inner urban areas having relatively low birth rates, compared to outer suburban or rural and regional areas. Birth rates have been changing, with a greater share of women bearing children at older ages or not at all, with overall increases in fertility rates. This can have a large impact on the future population profile.

Forecast fertility rates (births per woman)

Ballina Shire	Year		Change between 2011 and 2036
Area	2011	2036	Number
Ballina Shire	**2.23**	**2.21**	**-0.02**
Alstonville	2.18	2.16	-0.02
Ballina (Island)	2.17	2.14	-0.03
Ballina (North)	2.20	2.19	-0.01
Cumbalum - Tintenbar	2.70	2.67	-0.03
East Ballina	2.06	2.04	-0.02
Lennox Head	1.82	1.79	-0.02
Skennars Head	3.12	2.55	-0.58
Teven - Newrybar - Rural North	3.38	3.36	-0.02
Wardell - Rural South	2.54	2.53	-0.01
West Ballina	2.67	2.67	0
Wollongbar - McLeans Ridges	2.22	2.19	-0.04

Population and household forecasts, 2011 to 2036, prepared by .id , the population experts, February 2016.

Death rates

The forecast number of deaths in Ballina Shire is a reflection of death rates assumed for small areas. For historical years, this will equal the number of deaths published by the ABS, where this information was available at the time of forecasting. These rates are based on historical estimates for Ballina Shire, which have been extrapolated into the future, assuming an increase in expectation of life in all age groups (except 85 years and over).

Death rates are influential in shaping the numbers of older people in an area's population. Death rates too have been changing, with higher life expectancy at most ages, with men's life expectancy increasing more than that of women.

About the forecasts

The Ballina Shire population and household forecasts are undertaken by .id, the population experts, on behalf of the Ballina Shire.

During the forecast modeling process, .id assesses what is driving population change in the area and forecasts how the age structure and household types will change as result.

Forecasts are only as good as the assumptions they are based on, and.id works closely with the council to ensure we have detailed information about current and planned residential development activity. The forecasts are updated on a rolling cycle to take into account changes in the real world. All assumptions, as well as the results of the forecasts, are made available in this site.

The forecasts were last updated in February 2016. Forecasts are available for Ballina Shire and small areas for each year from 2011 to 2036.

The forecasts are designed to provide community groups, Council, investors, business, students and the general public with knowledge to make confident decisions about the future.

Whilst all due care has been taken to ensure the content of this website is accurate and current, there may be errors or omissions in it and no legal responsibility is accepted for the information and opinions in this report. In addition, as the website is based on historic information which is subject to revision, we do not guarantee its currency.

Annexure 4 Ballina Shire Industry Sector Reports – All Industries

under separate cover

Annexure 5 Bureau of Meteorology 2016 State of Climate Report

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